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HIGH OCTANE FUELS AND HIGH EFFICIENCY VEHICLES:

CHALLENGES AND OPPORTUNITIES

FRIDAY, APRIL 13, 2018

House of Representatives,

Subcommittee on Environment,

Committee on Energy and Commerce,

Washington, D.C.

The subcommittee met, pursuant to call, at 9:00 a.m., in Room 2123, Rayburn House Office Building, Hon. John Shimkus, [chairman of the subcommittee] presiding.

Present: Representatives Shimkus, McKinley, Barton, Harper, Olson, Johnson, Flores, Hudson, Cramer, Walberg, Carter, Duncan, Walden (ex officio), Tonko, Ruiz, Peters, Green, McNerney, Matsui, Pallone (ex officio).

Also Present: Representative Loebsack.

Staff Present: Mike Bloomquist, Staff Director; Samantha Bopp, Staff Assistant; Daniel Butler, Staff Assistant; Kelly Collins, Legislative Clerk, Energy/Environment; Jerry Couri, Deputy Chief Counsel, Environment; Wyatt Ellertson, Professional Staff, Energy/Environment; Margaret Tucker Fogarty, Staff Assistant; Jordan Haverly, Policy Coordinator, Environment; Ben Lieberman, Senior Counsel, Energy; Mary Martin, Chief Counsel, Energy/Environment; Drew McDowell, Executive Assistant; Brandon Mooney, Deputy Chief Counsel, Energy; Dan Schneider, Press Secretary; Peter Spencer, Professional Staff Member, Energy; Austin Stonebraker, Press Assistant; Hamlin Wade, Special Advisor, External Affairs; Jeff Carroll, Minority Staff Director; Jean Fruci, Minority Energy and Environment Policy Advisor; Caitlin Haberman, Minority Professional Staff Member; Rick Kessler, Minority Senior Advisor and Staff Director, Energy and Environment; Jourdan Lewis, Minority Staff Assistant; Alexander Ratner, Minority Policy Analyst; Tim Robinson, Minority Chief Counsel; Tuley Wright, Minority Energy and Environment Policy Advisor.

Mr. <u>Shimkus.</u> I ask all our guests today to please take their seats, and if we can get the doors being closed. Thank you.

The Subcommittee on the Environment will now come to order, and the chair now recognizes himself for 5 minutes for an opening statement.

This subcommittee has jurisdiction over the EPA programs affecting transportation fuels and vehicles, most significantly the Renewable Fuel Standard, as well as the Corporate Average Fuel Economy/Greenhouse Gas standards.

At our March 7 hearing on the future of fuels and vehicles we had a chance to learn more about the trends impacting personal transportation in the years ahead. One takeaway was that although electric vehicles will continue to make inroads, the internal combustion engine will still dominate the market for another three decades or more, as will petroleum and agriculturally based liquid fuels to power these engines. For this reason the RFS and CAFE/Greenhouse Gas programs will continue to have a significant impact for years to come.

One potential flaw with the RFS and the CAFE/Greenhouse Gas is that the two programs have never been fully coordinated with one another. The RFS doesn't necessarily give us the liquid fuel formulations that maximize energy efficiency and the CAFE/Greenhouse Gas doesn't necessarily result in the kinds of engines that make the best use of the biofuel blends.

Fortunately, there is new research underway to do better coordinating these programs. At the March hearing, we learned about DOE's Co-Optima initiative that is looking to maximize efficiency by using high octane fuels and engines specifically designed to run on these fuels. Ideally, this could benefit everyone from corn growers to biofuel producers, refiners, automakers, and most importantly, all consumers.

Today we seek to get the high octane policy discussion underway in earnest, and I welcome our witnesses.

High octane fuels can improve fuel economy in engines optimized for them. For automakers it is also a relatively low-cost tool to increase miles per gallon. And because ethanol is the cheapest source of octane currently available, it also may be a pathway to use at least as much, if not more ethanol than under the RFS.

But make no mistake, this is a major undertaking, and I say that respectfully. For one thing, we must deal with the proverbial chicken-and-egg conundrum. We can't expect refineries and gas stations to invest in new fuel unless they know that cars will be manufactured that will run on it. And automakers don't want to commit to new engines until they know that the fuel will be widely available. Significant investment dollars and a great many jobs may be at stake.

And there are a lot of details yet to be decided, including exactly what the high octane standards should be, how many years refiners and automakers need in order to make the transition, and what gas stations must do in order to provide this new fuel for new vehicles while still carrying the old fuels for existing vehicles.

We also must figure out what other legal and regulatory provisions need to be revised or repealed in order for a high octane transition to work. And most importantly of all, we need to make sure that what we do is of a net benefit to consumers.

One point I do want to emphasize: This hearing is not a discussion on EPA's midterm evaluation or the CAFE/Greenhouse Gas standards for model years 2022 through 2025. Regardless of the outcome of that process, we know for certain that fuel economy standards are going to continue increasing from where they are today and that automakers will need every cost-effective option for complying. High octane is one such option and is worthy of serious consideration, and today I hope we can get a constructive dialogue underway.

Thank you.

And I have a minute left. Anyone seek time on the majority side? If not, I would like to recognize the ranking member of the subcommittee, Mr. Tonko, for 5 minutes.

[The prepared statement of Mr. Shimkus follows:]

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Mr. Tonko. Thank you, Mr. Chair.

And thank you to our witnesses for joining us this morning.

I would like to think all of this subcommittee's hearings are high octane, but none more so than today's, which will focus on the challenges and opportunities of high octane fuels and vehicle efficiency.

Last month we heard broadly about the future of our Nation's transportation fuels. We learned more about DOE's Co-Optimization program, which is setting how to produce fuels and engines in tandem that will make our vehicles more efficient.

Today's panel represents a cross-section of the transportation sector: refiners, vehicle manufacturers, fuel producers, and retailers. This hearing comes as the administration and some Members of Congress have considered changes to our existing fuels and fuel economy policies.

Earlier this month, EPA straighter Scott Pruitt determined that emission standards for model year 2022 to 2025 light duty vehicles should be revised. Personally, I do not believe this decision is justified by the technical record.

Similarly, discussions on how to reform the Renewable Fuel Standard continue.

In both cases we must be mindful of the fact that greenhouse gas pollution from the transportation sector has become our Nation's largest source of emissions and needs to be reduced.

Currently refiners blend additives, most commonly ethanol, into gasoline in order to increase its octane level. A number of today's witnesses will express support for a 95

research octane number, or RON, fuel standard, which would be similar to fuels sold today as premium gasoline and generally cost about 50 cents more than regular unleaded. In theory, the standard would phase in over time.

But before we sign up for an upending policy shift, we need to better understand the consequences of this type of change. Clearly, it would impact all transportation stakeholders, including those represented on the panel, but also, and most importantly, consumers.

During any fuel transition period I believe it is natural that consumers will gravitate toward the cheapest fuel option as they have always done. It is critical to consider how consumers will deal with any potential fuel cost increase or confusion around misfueling.

The other issue to consider is how an octane standard would interact with or displace the RFS. Obviously, there are a wide variety of views on the RFS. I believe in some ways it has been successful in achieving its stated goals and in others it has fallen short, particularly around the development of advanced biofuels production.

In that case the question that I will find most important is, will moving to a high octane fuel standard do a better job in incentivizing and creating market signals for advanced biofuels? I think probably not, but I am open to hearing otherwise.

One success of the RFS has been the reduction in carbon pollution. The RFS supports fuels that are less carbon intensive than gasoline. But unless there are certain requirements, it is my understanding that a 95 RON fuel would not necessarily be

guaranteed to use ethanol or other low carbon biofuels and could potentially increase the carbon intensity of our Nation's fuel supply.

We should consider how best to ensure a transition to higher octane fuels does not permit a backslide on the gains that have already been made to improve air quality and reduce carbon emissions.

Similarly, how would this standard interact with CAFE standards? There is potential for higher octane fuels, coupled with turbocharged engines, to help achieve fuel economy standards. But I don't think this can or should be done without the certainty that these standards will continue and continue to be strengthened into the future.

I don't agree that our Nation's existing fuels and fuel economy programs are as problematic as some here. But I am sure these programs can be improved, and I am open to hearing ideas that seek to further the goals of these programs without eroding the progress that has already been made.

Once again, I want to thank our witnesses for joining us this morning. I look forward to hearing your testimony.

Mr. Chair, again, thanks for the hearing, and I yield back.

[The prepared statement of Mr. Tonko follows:]

****** COMMITTEE INSERT ******

Mr. Shimkus. The gentleman yields back his time.

The chair now recognizes the chairman of the full committee, Chairman Walden, for 5 minutes.

The Chairman. Thank you, Mr. Chairman.

And I want to welcome our witnesses for being here and all those who have been so engaged in this issue.

The Energy and Commerce Committee takes our obligation seriously to get the fuels and vehicles policy right. It is about time.

A vehicle and the gas it runs on is a major expense for households, as well as millions of small businesses, farms, and ranches. And the many companies that produce and sell fuels and vehicles employ millions of Americans, as we all know, and range in size from major automakers and refiners to small companies like Red Rock Biofuels, which is looking to help reduce the risk of wildfire in our forests by converting woody biomass into biofuel and jobs for the rural areas in my district in Lakeview, Oregon.

But getting the policy right isn't always easy, I think we would all admit to that here, especially with complex and sometimes contentious issues like the Renewable Fuel Standard and vehicle fuel economy standards.

Today we explore an idea to facilitate compliance with the RFS while also improving fuel economy. By transitioning to higher octane blends and vehicles whose engines are designed to maximize efficiency from those fuels we could both incorporate more ethanol into fuel supply while also increasing miles per gallon.

At first look it seems like an elegant way to make both the RFS and CAFE standards work better together. Of course whenever something sounds too good to be true it very well may be, so we need to kick the proverbial tires of this policy idea before moving ahead, and that is the purpose of today's hearing.

We need to be especially mindful of the consumer impacts. We want a policy outcome that brings down the cost of driving, so questions about the impact on the price per gallon at the pump and on sticker price of new vehicles will need to be addressed, as well, as will questions whether this is the most cost-effective means to improve fuel economy and to reduce emissions.

But while looking at these concerns, we also need to consider the upside potential of high octane fuels and vehicles. I look forward to the discussion today. And I would just thank the chairman of the subcommittee and others who are putting their shoulder to the wheel here.

This is a priority for me. It is a priority for this committee. It is a priority for the country. And we intend to move forward one way or another. So we appreciate that you all take that seriously as we do, and we look forward to having everybody at the table and working this out this year.

With that, I would yield back to the chairman of the subcommittee.

[The prepared statement of The Chairman follows:]

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Mr. Shimkus. The gentleman yields back the time.

The chair now recognizes the ranking member of the full committee, Congressman Pallone, for 5 minutes.

Mr. Pallone. Thank you, Mr. Chairman.

Some will say that establishing a high octane fuel standard can serve as an alternative to the current Renewable Fuel Standard, or RFS, program. But others have very different viewpoints. Today we will hear both sides and review whether moving to a high octane standard can satisfy enough stakeholders to move forward with RFS reform legislation. I remain skeptical.

As with any policy, the devil is in the details, and here are just a few of my questions. First, at what octane level would we set the standard? Second, is it a performance standard only or would we retain some discretion to designate clean and renewable fuels as a source for that octane? And, third, where would advanced and cellulosic biofuels fit into this new program? Fourth, what engine modifications are necessary and how quickly can they be integrated into new vehicle models? And, fifth, how would consumers be affected? And last, how will this affect workers in the refining, automotive, and agricultural sectors.

These answers make a big difference about how stakeholder groups will be impacted. Unfortunately, today's panel does not come close to representing everyone involved.

Congress enacted the RFS program to diversify the fuel supply, reduce

dependence on fossil fuels, promote rural development, and deliver environmental benefits. While it achieved many of these goals, especially in air quality, the record on environmental benefits of the RFS is mixed. High octane fuel standards may or may not deliver environmental benefits in terms of air quality, greenhouse gas emissions, and resource use.

This is critical, particularly in light of last week's announcement by EPA

Administrator Scott Pruitt that the Trump administration was going to roll back fuel

efficiency standards for passenger vehicles and light duty trucks. Continued growth of
greenhouse gas emissions in the transportation sector must stop, and fuel economy must
improve dramatically.

A policy change that extends the dominance of fossil fuel use in transportation, that slows improvement in vehicle fuel economic standards or keeps us on the path of increased carbon emissions in the transportation sector is unacceptable, in my opinion.

And the current RFS program is not perfect. In the past few days we learned that this administration's implementation of the RFS is far from perfect. I have serious concerns and questions about Administrator Pruitt's extensive use of secret waivers to allow numerous refineries, apparently of all shapes and sizes, to get out from their obligations under the law.

I support the judicious use of waivers as appropriate under law to relieve the burden on small refiners facing real hardship. However, these secret waivers by Administrator Pruitt seem to have gone far beyond the scope of the law to include

refineries that are neither small nor in financial distress, and that is absolutely not the way to address problems with RFS implementation.

We must evaluate this proposal for changes to the RFS program against its successes and shortcomings. The RFS has encouraged a great deal of investment by companies and individuals throughout the entire transportation, agricultural, and biotechnology sectors.

Without careful consideration and analysis we risk severe disruption and hardship for businesses, farmers, workers, consumers, and the environment, and trading one set of problems for another is simply not progress.

So I know this is going to be a valuable hearing. And I thank you, Mr. Chairman, and our ranking member for doing this today. Thank you.

[The prepared statement of Mr. Pallone follows:]

***** COMMITTEE INSERT ******

Mr. Shimkus. I thank the gentleman.

We now conclude with members' opening statements. The chair would like to remind members that pursuant to committee rules all members' openings statements will be made part of the record.

We want to thank all of our witnesses for being here today and taking the time to testify before the subcommittee. Today's witnesses will have the opportunity to give opening statements followed by a round of questions from members. So we will just begin.

First, I would like to recognize Mr. Timothy Columbus, general counsel, Society of Gasoline Marketers of America and the National Association of Convenience Stores.

Sir, you have 5 minutes. Your full testimony is in the record, and you are now recognized.

STATEMENTS OF TIM COLUMBUS, GENERAL COUNSEL, SOCIETY OF GASOLINE
MARKETERS OF AMERICA AND NATIONAL ASSOCIATION OF CONVENIENCE STORES;
EMILY SKOR, CEO, GROWTH ENERGY; DAN NICHOLSON, VICE PRESIDENT, GLOBAL
PROPULSION SYSTEMS, GENERAL MOTORS, ON BEHALF OF THE UNITED STATES
COUNCIL FOR AUTOMOTIVE RESEARCH; PAUL JESCHKE, CHAIRMAN, ILLINOIS CORN
GROWERS ASSOCIATION; AND CHET THOMPSON, PRESIDENT, AMERICAN FUEL AND
PETROCHEMICALS MANUFACTURERS

STATEMENT OF TIM COLUMBUS

Mr. Columbus. Thank you, Mr. Chairman.

Mr. <u>Shimkus.</u> I think we have got to turn the mike on is just probably one of the issues.

Mr. <u>Columbus.</u> It is why Emily is my friend. She helps me at these moments.

My name is Tim Columbus. I am from the law firm of Steptoe & Johnson. I appear today on behalf of our clients, the National Association of Convenience Stores and the Society of Independent Gasoline Marketers of America. These associations represent over 80 percent of retail fuel sales in the United States.

As a result of, as Mr. Tonko knows, my favorite term is the big stupid price signs, that market is the most transparent and price competitive commodities market on the

face of the earth.

Simply stated, retailers want to sell products in a legal way to people who want to buy them. They don't buy them because we sell them. We sell them because they want them.

Because they do not manufacture the products they sell, they favor, as do all buyers, deep, diverse markets behind them from which they can obtain supplies. And in that context I should comment that the RFS has, in fact, diversified the market from which our members purchase product.

As I told Chairman Shimkus and Ranking Member Tonko at their first roundtable on this issue, retailers seek peace in the valley. We believe that the concept that is being proposed today offers perhaps a path to achieve that objective.

Implementing a program in which all new cars would be required to run on higher octane fuels, fundamentally a performance standard, would have the following salutary effects, in our opinion.

Number one, consumers would benefit from, A, higher mileage, and B, that the costs of fuels would be driven down based on the economic advantage of their component parts. Today the cheapest octane on earth is, in fact, ethanol. I believe this opens a substantial opportunity for ethanol and that that can, in fact, lower the cost of motor fuels overall.

Number two, the environment would benefit from decreased auto emissions.

High compression engines are more efficient, we get better mileage, and we spew less

stuff into the air. It is a technical term, "stuff."

Fuel marketers would benefit from a continued and evolving diversity in supply, which will drive down their costs and, therefore, the costs of their customers. I believe fuels' manufacturers would benefit from their increased ability to supply products which are marketed based on their economic efficiencies in relevant markets, rather than based on a formulaic approach.

For retailer marketers in particular, the specific benefits of this approach, I think, are the following. The change in the product mix would occur over time. That results in at least at the outset minimal, if any, need to modify existing infrastructure. RON 95 is in the market today, and it is available at virtually every retail outlet in the United States.

By assuring an ever-increasing market for those new fuels, marketers will be in a position to make a decision to invest knowing that there is a guaranteed demand for the product that requires the investment and that they will be able to achieve an economic return.

By opening the market to new fuels and properly allocating responsibility for compliance amongst manufacturers, marketers, and consumers, retailers will have the option of introducing new fuels to the market to meet consumers' demand for those fuels.

In conclusion, NACS and SIGMA believe the concept being discussed today offers all the stakeholders in this debate the benefit of going forward based on a performance

rather than a formulaic standard.

I have been around some of you for a while. It has been my experience that when manufacturers face a performance standard it is the instance in which the great American competitive genius has produced the best economic results for the consumers and all of us who serve them.

We congratulate the subcommittee for holding this hearing. We urge you to move forward in an effort to alleviate the ongoing plague of industry squabbles and enhance the interests of fuel consumers in obtaining the most cost-effective fuels for their vehicles.

Thank you. I am happy to answer any questions that these comments or my statement may have raised for you.

[The prepared statement of Mr. Columbus follows:]

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Mr. <u>Shimkus.</u> The gentleman yields back time. The chair thanks the gentleman. The chair now recognizes Emily Skor, chief executive officer of Growth Energy.

Welcome. You are recognized for 5 minutes.

STATEMENT OF EMILY SKOR

Ms. <u>Skor.</u> Good morning, Chairman Shimkus, Ranking Member Tonko, and members of the subcommittee. Thank you for the opportunity to discuss the contributions of ethanol to high octane fuels and future vehicle fuel economy standards.

My name is Emily Skor, and I am the CEO of Growth Energy, America's leading biofuels trade association, proudly representing 89 producers, 83 technology innovators in the supply chain, and tens of thousands of supporters across the country, including in Illinois. We work to bring consumers better choices at the pump, grow America's economy, and improve the environment for future generations.

Ethanol is a homegrown biofuel that is now blended into 97 percent of standard gasoline, meeting more than 10 percent of our motor fuel needs. Ethanol-blended fuels have the highest octane of any available liquid alternative and allow for better-performing engines that deliver greater fuel efficiency.

American biofuels are ready to move America forward. With a stable policy and access to drivers, we can deliver low-carbon, low-cost, high-performing, sustainable vehicle fuel solutions.

Congress recognized the need for a more diverse and stable fuel supply and enacted the Renewable Fuel Standard to drive innovation and investment in renewable biofuels and open access to the marketplace. This energy policy is successfully driving advances in cellulosic ethanol, with plants operating at commercial scale, converting corn kernel fiber, corn stover, wood waste, and other biomass feed stocks into high-value energy.

To continue our progress and fulfill congressional goals, U.S. consumers must have greater access to alternative fuel choices at the pump. Growth Energy has been working with fuel retailers to build the marketplace for fuel with higher blends of ethanol, such as E15 and E85, as well as install the infrastructure that can be used for high octane midlevel ethanol blends, such as E30.

Today, low-cost higher blends are available at thousands of gas stations around the country. Consumers have already driven 4 billion miles on E15 and are ready to use this fuel nationwide year-round.

As fuel economy standards become increasingly stringent in the U.S. and worldwide, auto manufacturers are working toward more efficient engines that require high octane fuels to operate effectively and lower greenhouse gasses. Ethanol is a ready solution. With a natural 113 octane, ethanol has a lower carbon content than the gasoline components it replaces and provides increased engine efficiency to reduce greenhouse gas and criteria pollutant emissions.

Growth Energy has been a leader in pushing for higher octane midlevel ethanol

blends. We submitted the first proposal for a 100 RON E30 fuel nearly 7 years ago.

Robust research by national labs, automakers, and other scientific institutions has explored the myriad benefits of high octane fuels and specifically a midlevel blend in the E20 to E30 range. When paired with various higher compression ratio engines, these fuels increase vehicle engine efficiency, lower tail pipe emissions, and increase use of renewable fuel.

There have been recent discussions about moving to solely a 95 RON or 91 octane fuel standard. While we applaud any move to higher octane fuels, a 95 RON could easily be met with today's premium gasoline and there would be little to no incent for oil refiners to move to higher biofuel blends. The past decade has shown oil companies will actively ignore economic incentives just to prevent market entry of higher ethanol blends.

We cannot assume that such a modest increase in octane will drive growth in demand for American-made biofuels and agriculture without the access to market provided by the RFS. Only by coupling a stable RFS to maintain market access with a significant boost in octane from a midlevel ethanol blend can consumers realize significant cost savings, increased engine efficiency, and substantial environmental benefits.

Biofuels must be part of any long-term plan for engine efficiency and greenhouse gas reduction. However, any discussion of our future fuel mix cannot turn back the clock on the RFS. We cannot support a modest move in octane at the expense of one of the most successful domestic energy policies and the only legislated carbon reduction

program.

Thank you for the opportunity to testify, and I am happy to answer any questions.

[The prepared statement of Ms. Skor follows:]

****** INSERT 1-4 ******

Mr. Shimkus. Thank you.

The chair how recognizes Mr. Dan Nicholson, vice president, Global Propulsion Systems, General Motors, on behalf of the United States Council for Automotive Research.

You are recognized for 5 minutes.

STATEMENT OF DAN NICHOLSON

Mr. <u>Nicholson.</u> Chairman Walden, Chairman Shimkus, Ranking Member Pallone and Ranking Member Tonko, and members of the committee, my name is Dan Nicholson, vice president of Global Propulsion Systems for General Motors Company. I am here today representing General Motors, a member company of the United States Council for Automotive Research, USCAR. I appreciate the committee's invitation to appear before you to discuss the importance of increased octane in gasoline.

As you know, the automotive industry is changing at an unprecedented pace.

This requires all major mobility stakeholders to be better coordinated and to develop implementation strategies together.

As the committee explores options, such as changes to U.S. fuel standards that may include higher octane gasoline, it is necessary that the industries involved in this opportunity work more closely together in order to ensure that consumers benefit and our industries remain strong.

We believe increasing the minimum octane level in U.S. gasoline for new vehicles will be a win for all industries, and most importantly, consumers.

Today you will hear from many stakeholders involved in changing the liquid fuel market. This change requires the commitment of all parties. I would now like to take a few minutes to discuss the role of the automotive industry.

Currently many facets of the traditional automotive business are being disrupted. Innovative technologies are driving tremendous advancements in everything from safety and vehicle connectivity, to fuel efficiency and electrification.

Additionally, societal trends, like urbanization and sustainability, are changing the way customers think about and interact with mobility. As GM's Chairman and CEO Mary Barra likes to say, "The auto industry will change more in the next 5 years than it has in the last 50 years." We believe this gives us opportunity to make cars cleaner, safer, smarter, more efficient, and more fun to drive than ever before.

As part of this significant shift, the automotive industry has taken unprecedented steps to improve engine efficiency through downsized turbocharged engines, improved multispeed transmissions, and a host of eco-friendly improvements, all with the goal of meeting customer requirements while delivering improved efficiency.

The global automotive market is growing, and multiple technologies and solutions will be needed to match demand. Octane is one of those solutions. We have an opportunity to play a large role in offering consumers the most affordable option for fuel economy improvement and greenhouse gas reduction.

We believe a higher efficiency gasoline solution with a higher research octane number, or RON, is very important to achieving this.

U.S. car research shows that 95 RON makes sense from the viewpoints of both refiners and fuel retailers. As you may know, this is the same level of RON that Europe has used as their minimum level for many years. Without this new fuel, we will continue to endure the impacts of fuel variation and forego related available fuel economy improvement opportunities.

Ultimately, policy leadership is key to bringing about fundamental change in the market. Your leadership is critical here. We need to work together to improve the fuel in the U.S. market to take advantage of engine designs that are more efficient and provide significant large-scale fuel economy improvements and corresponding reductions in greenhouse gas emissions. And we must do so in a way that makes sense for consumers, which means developing a favorable consumer model for fuel and coordinated retail introduction.

Thank you again for the opportunity to be here today and to discuss the advantages of high octane fuels used in high efficiency vehicles.

[The prepared statement of Mr. Nicholson follows:]

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Mr. Shimkus. Thank you very much.

Now I would like to recognize Mr. Paul Jeschke, testifying on behalf of the Illinois Corn Growers Association.

We want to welcome you. You are recognized for 5 minutes.

STATEMENT OF PAUL JESCHKE

Mr. <u>Jeschke.</u> Thank you, Chairman Shimkus, Ranking Member Tonko. Thank you for inviting me here to speak about what high octane fuel can do for America's farmers.

As a corn farmer from the village of Mazon, Illinois, I never imagined that I would be sitting in this chamber in our Nation's Capital talking about corn-based higher octane fuels.

A growing body of evidence shows that high octane midlevel ethanol blends offer the most environmentally friendly and cost-effective route to increased vehicle efficiency and lower greenhouse gas emissions.

High octane gasoline derived solely from hydrocarbons is dirtier and more costly.

Today's premium fuels can cost 40 to 80 cents a gallon more than regular unleaded gasoline.

Consumers deserve an affordable high octane choice at the pump. Ethanol is simply the most cost-effective octane additive available in the marketplace.

A midlevel ethanol blend consists of 25 to 30 percent ethanol. Splash-blend that in today's regular gasoline blend stock and you would end up with an octane rating of 98 to 100 RON, higher than today's premium. This fuel would enable more efficient vehicles and lower greenhouse gas emissions.

High octane midlevel ethanol blends mean lower costs for both refiners and consumers. These fuels could be made by splash-blending ethanol into existing regular gasoline blend stock with no change at the refinery. These blends would reduce upstream greenhouse gas emissions because ethanol is less carbon intensive and it would improve air quality as ethanol displaces harmful air pollutants from aromatic hydrocarbons.

Given our trend line gains in corn yields, I believe we can meet the future demand for corn-based ethanol on the land that we are farming now. Farmers are growing more corn, or more octane per acre, now than ever before.

The growth of corn ethanol production has done more to bring profitability to corn farmers than any of the many government support programs which I have experienced. And ethanol's development was financed to a large extent with farmer investment. This profitability allowed many young people to return to the farm, including my nephew in my case.

But domestic ethanol use has stagnated and our profitability is again collapsing.

Since 2014 Illinois farm profit has been dismal. This projects a bleak future for all of us, but especially these younger farmers.

What can be done? The answer seems clear to me. As our vehicles of the future need higher octane, cleaner-burning fuel, we should look to higher blends of ethanol. Our Nation's fueling infrastructure can already accommodate midlevel ethanol blends, and with only minor investments the needed fueling infrastructure could be readily available nationwide, similar to that of diesel fuel.

Unfortunately, the EPA regulations are stifling both fuel and engine innovations, preventing consumers from enjoying the performance benefits and fuel savings of mid-ethanol blends. Until these barriers are addressed, it is simply not true that a minimum octane standard would provide the biofuel industry with the opportunity to expand its market share.

For ethanol to be free to compete in the market on the basis of its value as an octane enhancer, the EPA's anticompetitive regulations must be corrected.

Some of these regulatory concerns are the same RVP standards for all fuels containing at least 10 percent ethanol, which may have happened yesterday: a new high octane, midlevel ethanol alternative certification fuel, such as a 98 to 100 E25; a fuel economy equation that does not penalize ethanol blends; a technology-neutral fuel economy and GHG regulatory scheme that treats all alternative fuels alike to the extent that they reduce petroleum consumption and greenhouse gas emissions; an accurate lifecycle analysis of the greenhouse gas benefits of corn ethanol, like those that the USDA and the Department of Energy have already developed.

EPA could address these issues through regulation, without the need for new

legislation.

In addition, automakers should warranty new vehicles for ethanol concentrations of up to 25 percent, similar as BMW has already done for some of their vehicles.

Removing these barriers would clear the road for high octane, high-efficiency vehicles. More details on these points and other observations and suggestions are covered in the written testimony that I have submitted.

I am proud of what we do on my family's farm. I am proud that our corn crop can have a part to play in the high octane future that is heading our way if we are allowed to do so. America's corn farmers are ready to do our part to deliver.

Thank you, Mr. Chairman.

[The prepared statement of Mr. Jeschke follows:]

****** INSERT 1-6 ******

Mr. Shimkus. Thank you very much for joining us today.

And now I would like to turn to Mr. Chet Thompson, president and CEO of the American Fuel and Petrochemical Manufacturers.

Sir, your full statement is in the record. You have 5 minutes.

STATEMENT OF CHET THOMPSON

Mr. <u>Thompson.</u> Thank you, Chairman Shimkus, Chairman Walden, Ranking Member Tonko, members of the subcommittee. Thank you for the opportunity to bat cleanup this morning and provide the AFPM's views on this important subject of higher octane fuel.

As you mentioned, my name is Chet Thompson. I am the president and CEO of the American Fuel and Petrochemical Manufacturers, AFPM. We believe we are uniquely qualified to weigh in on this topic as we represent the U.S. refining industry and supply virtually all of the gasoline used in the country today. So I will use my limited time to focus on a few aspects of my written testimony.

First, AFPM is absolutely intrigued by the possibilities and opportunities that could be afforded by a higher octane fuel. Such fuels, as you mentioned, Mr. Chairman, could be a solution to the RFS that works for all stakeholders.

Again, also as you mentioned, today's hearing comes at a critical time for the U.S. fuel and automotive sectors. The auto industry faces enormous challenges to comply

with CAFE while at the same time meeting consumer preferences. The refining industry is dealing with an inefficient and unworkable Renewable Fuel Standard that is only going to get worse with time.

Fuel marketers in the biofuel industry don't have it easy either, to be sure. They are faced with constant uncertainty and never-ending debates about the RFS, making for a very challenging business environment.

Again, these uncertainties will grow worse with every moment we move closer to 2022 when EPA takes over this program. But we believe there is a potential solution for all of this, higher octane fuel.

If done correctly, and by that I am going to get into what "done correctly" means in a minute, higher octane fuel has the potential to make life better for everyone at this table and in this room.

Over the last few years we have been evaluating the benefits of various octane levels. Our detailed analysis show that a 95 RON performance standard could be an efficient and affordable option to reduce emissions and meet the needs of the auto sector.

A 95 RON standard would help auto companies, as Mr. Nicholson said, comply with CAFE by meaningfully improving the efficiency of the internal combustion engine.

By our estimates, 95 RON would reduce greenhouse gas emissions in this country by the equivalent of putting 720,000 EVs on the road each year.

So let me put that number in perspective. In 2016 200,000 EVs were sold

globally. So we are talking about tripling that year after year through 95 RON. And if you look at figure 3 on page 9 of my testimony, you can see that 95 RON is the lowest-cost fuel option for making these gains, 95 RON is the lowest cost option for consumers.

So finally it also has the benefit, 95 RON, of being available and scalable nationwide on the timeline needed by the auto industry. No other octane level can make this claim, not a single one.

So we believe a 95 RON would be good for the ethanol industry, as well. I am sure they appreciate me saying that. We would expect it to provide them with every bit as much ethanol demand as they get under the RFS and likely more. This is true for a simple reason, because ethanol at the moment is a low-cost source of octane. So it follows that they would thrive under a high octane performance standard, one done under the free market and not through government mandate.

Fuel marketers would benefit as well, as Mr. Columbus said. A fuel-neutral 95 RON performance standard would provide marketers with optionality and flexibility. Importantly, this would translate to the benefit of consumers by creating a transparent and competitive market for all liquid fuels.

Finally, my members would certainly benefit, as well. Sunsetting the RFS and transitioning to a 95 RON performance standard would end mandates, reduce overall compliance burdens, and provide achievable regulatory targets.

So such a standard would require enormous investments from my industry. Tens

of billions of dollars would be needed. So we certainly don't take this hearing lightly.

We are, however, willing to entertain it for one simple reason: frankly, as a compromise solution to the RFS that we, again, believe could work for all stakeholders.

But for it to make sense to us, frankly, under any circumstances a 95 RON standard would have to include three elements. First, it would have to be accompanied by a sunset of the RFS. The refining industry simply can't comply with the burdens of the RFS at the same time making investments to bring 95 RON to market. Second, it would have to be implemented over a reasonable period of time. And third, it must include measures to prevent misfueling.

As to the latter, we are certainly in a process now to evaluate all the obstacles that would be brought about by bringing a new fuel to market. We are working on that.

These issues are real. But the good news is, is through our analysis so far we don't think any of these obstacles are insurmountable.

So in conclusion, AFPM believes that higher octane fuel has the potential to better harmonize our country's fuel and vehicle policies, and for that reason we believe it deserves further consideration and analysis.

We thank you, Mr. Chairman, for the opportunity to be here today.

[The prepared statement of Mr. Thompson follows:]

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Mr. Shimkus. Thank you very much. I appreciate everybody's testimony.

To my colleagues on the subcommittee, welcome to my world. I believe that we are closer than people think. And I want to encourage my colleagues to really help now dig into this issue specifically so we can address and work through some of these concerns.

Having said that, I would like to recognize myself 5 minutes for my first round of questions.

For all you all -- that is what we say in southern Illinois, all you all -- this hearing is more about the high octane concept overall and less about debating the specifics, such as where that number should be set. So without advocating for a specific number, can each of you sketch out what you need in order for high octane fuels to work for you and your member companies?

Tim.

Mr. <u>Columbus.</u> We believe there are a couple things that we would have to have. Number one, we would have to have a regulatory regime that guaranteed retailers who complied with warnings, signage standards, that if a motorist introduced the wrong fuel into his new vehicle the Environmental Protection Agency would not be holding the retailer accountable for that.

When we went from leaded to unleaded gasoline retailers were prosecuted by EPA if consumers put leaded gasoline in a vehicle meant for unleaded. That has got to change for us.

Number two, we would think it would be crucial that the one-pound waiver Reid vapor pressure requirements afforded E10 be extended to any blend of fuels that has an RVP equal to or less than E10.

And finally, and others can speak to this as well, I would hope that you could do something to accelerate the approval process for new gasolines. I think it took 3 years to do E15. If we are going to go to higher blends, and I anticipate that over time we would go to higher blends than just E10, E15, I think the market will end up demanding more than 95 RON; 95 RON is a floor for us, not a cap.

Mr. Shimkus. Ms. Skor.

Ms. <u>Skor.</u> Thank you. I would have to echo much of what Mr. Columbus said in that, yes, first and foremost, the ability to sell a legal fuel such as E15 year-round and any blends above 10 percent year-round is going to be absolutely paramount because you look at that today, and that is really the largest impediment to much further market adoption of E15.

I would second that the approval process of new fuels has been very slow and cumbersome, so that, too, is something that you would want to see expedited, again in continuance of this quest for a free market and access to the consumer in the marketplace.

And importantly, any discussion of high octane -- and I appreciate how much ethanol is recognized as the cheapest octane source on the planet. Having said that, if you look at the last decade of market behavior and dynamics, refiners do walk away from

that economic source of octane due to competition. And so we would like to see and we would need to see that there is a designation that that high octane source is renewable fuels as the source of octane.

Mr. Shimkus. Mr. Nicholson.

Mr. <u>Nicholson.</u> We need one national standard for the fuel. That is important to us. And we would like to be part of making sure the specifications are correct and that it is interrelated with emissions criteria. But one national standard, I think, is what we are seeking.

Mr. Shimkus. Mr. Jeschke.

Mr. <u>Jeschke.</u> Well, as a supplier of the raw materials for ethanol, corn farmers are ready to do their part. We have got piles of corn all over this country right now on the ground yet. That is how much of a surplus of that commodity we have. Those are being picked up now.

But, again, the raw material that we are providing can easily be geared up. We are growing naturally yields about 1 percent a year. And so, I think we can do our part.

Mr. Shimkus. Mr. Thompson.

Mr. <u>Thompson.</u> We need the RFS to sunset. We cannot do both high octane fuel and the RFS.

Mr. Shimkus. Great. Thanks.

For growth and the corn growers, would you support any level of stringency that gives you at least as much ethanol that you currently use today?

Ms. <u>Skor.</u> So I think if the conversation is simply high octane standards, that is a wonderful thing that we should be moving toward as a country. If the conversation is a high octane standard coupled with some change to the RFS, that is a different conversation.

If you look at the market potential that is the congressional intent of the RFS,

90 percent of our market access is yet to come, and that is on the advanced side. So

importantly, one of the things that we get that we have provided with the market access

of the Renewable Fuel Standard is that innovation and that drive toward use of --

Mr. <u>Shimkus.</u> My time is about ready to expire, and I want Mr. Jeschke to get a chance to answer. But you didn't answer the question on stringency.

So, Mr. Jeschke.

Mr. <u>Jeschke.</u> We are wanting to grow the market. Again, I talked about the piles of corn we have. So we are wanting to grow our share of the fuel market ethanol production. We think it is good for farmers and good for the environment.

Mr. Shimkus. Great. Thank you very much.

The chair now recognizes the ranking member of the subcommittee, Mr. Tonko, for 5 minutes.

Mr. <u>Tonko</u>. Thank you.

Mr. Thompson, if the RFS is replaced with the high octane standard, as you suggest, it is my understanding that there are other petrochemical-derived chemicals that could be blended into gasoline to achieve the octane rating of premium fuel. Is that

correct?

Mr. <u>Thompson.</u> Yes, that is correct. Gasoline is a blend, and there are lots of blends that have octane in it. But our analysis shows if we went to a 95 RON standard ethanol would continue to be the dominant source of octane.

Mr. <u>Tonko.</u> Right. Okay. But some refineries might choose to meet the octane standard with an additive other than ethanol. Would that be an option in the absence of the RFS program's mandate or some other requirement to blend renewable fuel with gasoline?

Mr. <u>Thompson.</u> Certainly that would be an option provided it can be done consistent with air quality and their local permitting, which absolutely our modeling shows that there would be no environmental detriment due to other sources of octane being used.

Mr. Tonko. Thank you.

I would point out that when Congress mandated a performance standard to increase the oxygenate content the industry used MTBE to achieve this standard, and we ended up with a terrible drinking water pollution problem. So before we open the door to increased blending with other additives I would like to know what risks might be involved in making that decision.

Ms. Skor, the RFS program was intended to reduce petroleum use and to increase the use of renewable fuels. If renewable fuels are no longer specified and we replace the RFS with a high octane standard set at 95 RON levels, what is the impact on the

overall demand for renewable fuel?

Ms. <u>Skor.</u> Well, there would be no impact on the overall demand. I mean, as has been stated by the other panelists, a 95 RON is a 91 premium fuel. It is currently sold on the marketplace, often with a 10 percent ethanol blend. So if we move to a national standard of 91 there would be little to no incentive to further use biofuels in our national transportation mix.

Mr. <u>Tonko.</u> So what might this mean for the development of advanced biofuels and for the transition to greater use of cellulosic biofuels?

Ms. <u>Skor.</u> Well this would eviscerate really all of the innovation and investment that has taken place so far if you look at advanced biofuels. Just a few years ago, when the RFS blending targets were put on hold, we as a Nation lost billions of investments in next-generation technology because of the lack of certainty that these fuels that I will say contribute 90-plus percent greenhouse gas reduction, the uncertainty that there would be no market for them in the U.S.

Mr. <u>Tonko.</u> As we have discussed, the Department of Energy, in collaboration with vehicle manufacturers, has been exploring the optimal combination of high octane fuels with advanced high-compression engines, the Co-Optima study. My understanding is the octane levels they are working with are 95 or 96 octane or 100 RON, and that the source of octane is presumed to be renewable fuels at blends that are E25 to perhaps E30. Is that correct, Ms. Skor?

Ms. Skor. Yes, that is correct. And that program is similar to a large body of

work that is examining the sweet spot, if you will, in an E20 to an E30 blend where you are optimizing the cost savings for consumers coupled with that 90 percent greenhouse gas reduction that you are going to be getting -- or excuse me, the greater greenhouse gas reduction -- and the reduced tailpipe emissions.

Mr. <u>Tonko.</u> Thank you.

And, Mr. Columbus, you and I have discussed that when it comes to fuels there is one thing consumers care about above all else, and that is the price.

Mr. <u>Columbus.</u> Yes, sir.

Mr. <u>Tonko</u>. I imagine during the transition to a 95 RON fuel standard there will be some new vehicles that will require something similar to today's premium fuel and many existing vehicles which continue to opt for the cheapest option. How do you envision consumer acceptance of a requirement to buy more expensive fuel?

Mr. <u>Columbus.</u> Well, first of all, let's talk about premium gasoline prices today as opposed to regular grade gasoline. It is a specialty product, Mr. Tonko. It is like going someplace and trying to get ethanol-free gasoline. People pay a premium for it because there is very narrow demand for it today.

Having said that, I envision that a 95 RON, if it is coupled with a waiver of the one-pound waiver for higher blends of ethanol, you are going to see prices come down on that product. Why? Because ethanol is, in fact, the cheapest product.

Something I want you to always remember, Mr. Thompson's members are important to us, but they are not the only source of blend stocks on the face of the earth.

If, in fact, there are cheaper forms of blend stock, my clients will do so. Many of them today have introduced E15. Why? Because it is cheaper in the retail market because of the ethanol component. So that ability to use increased amounts.

There is, however, a cap on that, and that is you have to have an infrastructure that will handle it, sir. And today EPA's rules say if it is not certified to hold a higher blend than E10, not warranted, and a retailer cannot affirmatively demonstrate that that equipment is compatible, and it goes back to the MTBE stuff, he has violated the Resource Conservation Recovery Act. So prices will come down because component prices will come down.

Mr. Shimkus. The gentleman's time has expired.

The chair now recognizes the chairman of the full committee, Mr. Walden.

The <u>Chairman</u>. Thank you very much, Mr. Chairman. And I very much appreciate your willingness to chair this subcommittee and take on this issue. I know how much fun it must be for you being conflicted with all these things. But you are doing a great job, and we appreciate it.

To everybody on the panel, in one capacity or another you are all involved in the Renewable Fuel Standard or you wouldn't be before us today. Can I get you all to agree that a high octane fuel standard, if done right, could be an improvement over the status quo? And that is a pretty easy yes or no. Start at that end.

Mr. Columbus. Yes.

Ms. Skor. A high octane standard, provided that you couple that with the market

access and the drive toward growth that you get with a Renewable Fuel Standard.

The <u>Chairman</u>. So I just want to make sure we are answering the same question.

Can you agree that a high octane fuel standard, if done correctly, could be an improvement over the status quo, yes or no?

Ms. Skor. Possibly.

The <u>Chairman</u>. Okay.

Mr. Nicholson. Absolutely, yes.

The Chairman. Thank you.

Mr. <u>Jeschke.</u> I will take a chance and say yes.

The <u>Chairman</u>. Okay.

Mr. Thompson. Yes, sir.

The Chairman. Thank you.

Mr. Columbus, the gas station is where the fuel policy either succeeds or fails because that is the interface with the consumer, and you have done a good job of representing the consumers here. On balance do you see a high octane fuel standard potentially working for the benefit of the consumer?

Mr. Columbus. I do, sir.

The Chairman. All right.

Ms. Skor, one of the exciting things about the high octane fuel standard -- well, our version of it -- is that it allows us to take full advantage of ethanol's properties as an octane enhancer. Would you agree that such a policy could lead to a more

advantageous use of ethanol?

Ms. <u>Skor.</u> I think the 95 RON policy discussed right now will not necessarily lead to a more advantageous use of biofuel for consumers.

The <u>Chairman.</u> You know, I was on this committee, there are a few of us left that were in 2005, 2006, 2007. The energy situation we faced then is much different than it is today. That was an era of scarcity. We were watching what was going on in Brazil with ethanol. I mean, it was a different world.

And I supported the RFS then, and I have worked on it, and I have got an a little bit of that. And I think there is a difference, by the way, between corn ethanol and the advance in cellulosic, and you mentioned that in your comments.

I was in the radio business for 21 years. I would have loved to have had a mandate that somebody has to buy my inventory. I am just saying. I grew up on a farm. I get it. I am an orchardist. I respect corn growers.

But as the chairman of this committee I have this advantage of looking at this broadly and trying to figure out what is the best policy for American farmers, what is the best policy for consumers, and how do we move this policy forward in knowing that 2022 is out there.

Now, some people I know may want to just roll the dice and go: We will see, we will just ride it, see what happens. I don't think that is the responsibility of Congress. I think our job is to set the policy as we did in 2005-2007 to try and resolve a problem then. I think it is time to modernize that policy.

And I just want people at the table to understand we are serious about this one way or the other, and we want to get it right for the American consumer so it is sustainable, predictable, and we continue to make progress to reduce harmful emissions, we continue to help our farmers, but we also put the consumer first, the consumer first.

And so I struggle with this. This is a hard one for all of us. And we know that realities of the Senate. We know the realities in getting votes around here. I understand all the market forces, political market forces at work. I am not naive to that. But I think we have a big responsibility to the country here to do this right.

And so I don't know if I have got any more questions on it. I appreciate you all being here. I know you are all looking at this seriously. I just want to implore that we continue these discussions, because I think there is a path forward that will work for our growers wherever ethanol is being produced, grown, and that can work for the consumers and give the stability.

And I want to thank the autos for coming to the table, because we want to make sure we are not jamming something that will not work for engines. And I would defer to you about that, that issue.

If we do this right, you will create demand for this higher octane, right? It will be predictable.

Mr. <u>Nicholson.</u> Yes, we are very happy about this. This is the most cost-effective way to increase fuel economy and reduce greenhouse gasses. And so we are really happy to have the hearings and to move this forward as quickly as possible.

The <u>Chairman.</u> And, Mr. Thompson, from your perspective, are there issues in other States that could be adversely affected if we get the number wrong?

Mr. <u>Thompson.</u> Absolutely. So, again, we can talk conceptually about E20, E30, but if we put it in the context of what we are trying to do is address CAFE in the near term, 95 RON is the only product that can be sold nationwide. California and five other States do not allow the sale of E15 or higher octane blends.

So how could we put the autos in a position of rolling out a new product but not be able to get fuel to them? Ninety-five RON is the only product that is scalable within the timeframe of CAFE compliance.

RPTR KEAN

EDTR CRYSTAL

[10:00 A.M.]

The <u>Chairman.</u> I know I have exceeded my time. Thank you, Mr. Chairman, for your leadership on this.

And, again, to everybody on the panel, we know you are serious about it. We appreciate your working with us.

And I yield back.

Mr. Shimkus. The gentleman yields back his time.

The chair now recognizes the gentleman from Texas, Mr. Green, for 5 minutes.

Mr. <u>Green.</u> Thank you, Mr. Chairman, for having this hearing, although I would at least ask for one more refiner on there to match up with the corn folks here.

I want to follow up what the chair said, that 2005, 2006, 2007 and 2008, this subcommittee had a hearing in 2008 on peak oil. Obviously, it has changed to 2018.

Mr. Columbus, your members actually typically sell what we call regular gas and premium gas.

Mr. Columbus. Yes, sir.

Mr. Green. What is the percentage right now that you are selling of premium?

Mr. Columbus. Under 20.

Mr. Green. Under 20 percent?

Mr. <u>Columbus.</u> Somewhere around 15. Well, yeah, I am not even sure premium. Regular grade gasoline is something north of 70 percent, sir. Midgrade 89 octane. Premium gasoline is probably 10 to 12 percent.

Mr. <u>Green.</u> Well, most of our vehicles on the road today are made for running very efficiently at regular gas. And if we do it, and maybe the manufacturers will do it, so if we end up going to 95 percent, you are going to increase the cost at the pump for people running their vehicles.

Mr. <u>Columbus.</u> All right. Number one, perhaps initially it is not clear to me, sir, that on a long-term that is going to work. The reason E15 has entered markets where it is lawful is it is offered at a price which is less than regular grade gasoline.

Mr. <u>Green.</u> Not in my area in Houston. Very often we don't have a whole lot of --

Mr. Columbus. Well, not at all.

Mr. Shimkus. Everything is bigger in Texas.

Mr. <u>Green.</u> That is right.

But that is one of my concerns. And I am glad the manufacturers are here because they make the vehicles. And our fleets turn over fairly regularly, so people may not notice it. But by doing this, you will require that people pay more at the pump, which is not a popular issue. And you are a marketer. You are not the one.

Mr. <u>Columbus.</u> No. Again, sir, I believe experience shows us that if there is an absolute demand for a product, the price of it tends to go down. This is a 7 percent shift

in vehicles every year. As that product comes in, I don't doubt that at first it will be priced higher than regular grade gasoline simply because it will still be a specialty product.

As you evolve, as you transform the market, that price will come down. And, again, if you give me the one-pound waiver on higher blends and give me time to redo the infrastructure to tolerate them, I suggest that you will find that that price becomes very competitive and looks a lot like what regular gasoline or less than regular gasoline would cost today.

Mr. <u>Green.</u> Well, my concern is right now that if we change the fleet over the period of years people are going to pay more at the pump. And right now I am hearing people, even in Houston, complaining that the price is going up, because we are going to a summer blend in Texas and that is more expensive to refine. So that is one of the concerns.

I was on the committee in 2005, and I want to thank our former chairman, Joe Barton, who was here a minute ago, who was the chair of the committee. We did a really good energy bill. And a lot of my environmentalists forget that that bill also authorized the wind power, the solar power, and what we have done on our electricity generation.

But the RFS I considered was a failure, because here we are 13 years later. And I have one relatively small biofuel refinery in my district. We used to have three, but they couldn't go with the market over the last number of years.

But when we talk about biofuels, what percentage is corn-based, Ms. Skor, corn-based as compared to what some of us thought back in 2005, it would be cellulosic, we would be recycling things, instead of making the price of our corn whiskey go up?

Ms. <u>Skor.</u> Right now the vast majority is blended with corn ethanol, so conventional ethanol.

We do have advanced cellulosic ethanol on the market. And I would say that if you look at the progress that has been made in the 10 years, one of the things that has slowed our ability to innovate and get more cellulosic to the market was the implementation of the RFS and the uncertainty in terms of what was taking place at EPA.

That uncertainty sends the wrong market signal to innovators and investors.

And so it is with stable policy that we will get more.

Mr. <u>Green.</u> I only have a few more seconds. And I agree, because in my area in Texas we were reformulating our gas in the 1990s, early 1990s, and it was an environmental benefit. But we used MTBE, a product of natural gas. But the 2005 energy bill, the House bill actually had a waiver there for those producers of MTBE, but the Senate didn't accept it.

We are still producing MTBE in Texas for export market, but we can't use to it reformulate our gas. And now we have lots of natural gas that we could be using that for.

Mr. Chairman, I know you and I have this battle for a number of years.

Mr. Shimkus. Welcome to my world.

Mr. <u>Green.</u> I would like to reform the RFS, but I am not so sure this is the way it needs to be reformed.

Mr. Shimkus. The gentleman's time has expired.

The chair now recognizes the other gentleman from Texas, in a bipartisan manner, the gentleman, Congressman Barton, for 5 minutes.

Mr. <u>Barton.</u> Thank you, Mr. Chairman. And I am here under protest. I don't do getaway hearings and I darned sure don't do hearings that start at 9 in the morning.

Fortunately, we have a witness that represents one of the companies that is one of the biggest employers in my district. General Motors has an assembly plant in Arlington, Texas, that is one of the most successful plants in their company. And so I am honored to be at this hearing because of that.

I listened to Chairman Walden, and I will say, the country is well served that he is the chairman right now. If I were still chairman, I would be in a wrestling match with Chairman Shimkus because I would be repealing the Renewable Fuel Standard and I would take a go at repealing the Corporate Fuel Economy standard.

I was chairman in 2005, and we have the RFS, the original RFS, because the Speaker of the House was Denny Hastert from Illinois. And he said, "We are not going to have a debate about this, Joe. You are chairman, but I am Speaker." And that was pretty determinative. I mean, I said, "Yes, sir, Mr. Speaker." But it was a more lenient RFS, I think a more reasonable RFS.

So there is no question that it is important to our corn growers, our agricultural

sector. But at the same time, nobody can say ethanol is a struggling startup industry anymore. So you don't really need all the protection, the mandates, the quotas that we have today. So this octane alternative, high octane alternative, I think is a very reasonable proposal. I really do.

So I guess my question to Mr. Nicholson would be, is there any doubt that the manufacturers can manufacture engines to use that type of fuel?

Mr. <u>Nicholson.</u> There is no doubt. We are at the table. I am representing USCAR, and we are all prepared to do our part to redesign the engines at great expense and great investment in order to deliver this roughly 3 percent fuel economy improvement from the 95 RON. It is very important. And we think it is a consumer-facing way that consumers will get benefit from and we will get reduced greenhouse gases. So we are here and ready to support.

Mr. <u>Barton.</u> And I guess -- is it Skor, is that how you say it? You seem to be the proponent of the ethanol industry.

Ms. Skor. Yes, I am.

Mr. <u>Barton.</u> Is there any doubt in your mind that the group that you represent, that if we were to move to allowing a high octane fuel that your industry still wouldn't thrive?

Ms. <u>Skor.</u> You know, honestly, we wish that we could because of all of the reasons, the benefits of ethanol as high octane and homegrown renewable fuel.

The challenge, and the reason that we believe we continue to need the guardrails

provided by something like the Renewable Fuel Standard is it is not an open marketplace.

We don't have access to the consumer. And until there is a marketplace where we can --

Mr. <u>Barton.</u> What do you mean by that? What do you mean you don't have access to the consumer?

Ms. <u>Skor.</u> If you look at the fuel marketplace, so much of the access to the --Mr. Barton. You have guaranteed access.

Ms. <u>Skor.</u> Yes, with the Renewable Fuel Standard now we do have the ability to compete. And what we would want to see in conversations moving forward is, what is the path for continued access to the consumer?

Mr. <u>Barton.</u> Well, I am going to give back a minute, Mr. Chairman. I do appreciate you holding the hearing. I will yield to Mr. Flores, if you want my last minute.

Mr. <u>Flores.</u> That is okay, Mr. Chairman, because I have got a ton of questions. This is a great panel.

One of the things I am hearing is that everybody agrees we need to have a higher octane standard, right? Okay.

The second thing, the questions I am hearing are, how much? How high should that go? How do we get there?

And then the third thing I am hearing is, how long should we spend to go from where we are today to go to that new standard, so that not only can the ethanol industry and the retailers and the auto manufacturers and the refiners get ready for that, but also

get our consumers educated and ready for this new world of higher RON?

I only have a few seconds left, so I will wait and use that as my intro for the next round. But it does sound like it is a win-win-win for the environment, for our consumers, for the ethanol markets, including advanced and cellulosic conventional for our marketers and retailers, and also for our refiners and auto manufacturers. It sounds to me like everybody wins. So I think we need to look at that versus status quo, which is clearly a loser.

I yield back.

Mr. Shimkus. The gentleman's time has expired.

We are going to have votes pretty soon. I plan to come back, Mr. Tonko is going to come back, so that we can finish our questions and maybe go to a second round for those who want to delve back in this.

The chair now recognizes the gentleman from California, Mr. McNerney, for 5 minutes.

Mr. McNerney. Okay. Well, I appreciate the chairman jumping over to me.

And I appreciate the panelists here this morning.

Mr. Nicholson, I am very concerned about the Trump administration's proposal to roll back greenhouse gas and fuel economy standards for model years 2022 to 2025 automobiles and light trucks. My State of California is committed to reducing tailpipe emissions and getting vehicles on the market that use less fuel and emit less carbon per vehicle mile traveled.

So given that backdrop, I would like to know where GM stands on EPA

Administrator Scott Pruitt's recent statement in opposition to California's ability to set greenhouse gas emission standards for automobiles under the Clean Air Act.

So does GM agree with Administrator Pruitt's opposition to the California waiver?

Mr. Nicholson. Can you ask the last part of the question again?

Mr. <u>McNerney.</u> Sure. Does GM agree with Administrator Pruitt's opposition to the California waiver?

Mr. Nicholson. So that is not a question about the midterm review or --

Mr. McNerney. That is right. It is a question about your agreement with --

Mr. <u>Nicholson</u>. Yeah, I am not really prepared to give General Motors' point of view on that question. I am in global propulsion systems and product development and we are here to talk about octane and engines. And I am not really informed about the waiver or whether that is okay or not okay.

Mr. McNerney. Well, this is an important question, especially to California, but to the Nation in general. If the automakers understand, in my opinion, that the high fuel efficiency standards are in their interest in the international auto market, then they should be in opposition to this potential opposition.

Mr. <u>Nicholson.</u> We do have a prepared statement on the midterm review, and I would be happy to share that with the committee.

Mr. McNerney. All right.

Ms. Skor, Mr. Thompson has proposed replacing the Renewable Fuel Standard

with 95 RON octane performance standards. However, if the octane is not sourced from ethanol, wouldn't this just lead to an increased oil use?

Ms. <u>Skor.</u> Potentially. Ninety-five RON is a 91 octane fuel. That is the premium fuel on the market today. There is every opportunity, in many instances, for refiners to make that premium fuel with more ethanol, and yet, they are not doing it, even with the economic incentive of ethanol as the lowest octane. So 95 RON, at best it is status quo and perhaps you will be using less ethanol than today.

Mr. McNerney. Thank you.

It wasn't that long ago that we were hearing about E15 causing damage in engines. We had a Briggs & Stratton in here, some of the auto manufacturers were concerned about that.

Is that still a concern about E15 damaging engines and causing long-term damage?

Ms. <u>Skor.</u> Is that a question for me?

Mr. McNerney. You can answer it if you want.

Ms. <u>Skor.</u> Well, I will defer to the auto. But I will say, kind of, I will provide part of an answer. E15 is approved for 9 out of 10 vehicles on the road today. And so, in fact, I applaud GM for being the first company to warranty E15 when it became a legal fuel.

So it is not approved for small engines. So all of the retailers who sell E15 also sell E10. Some also sell an E0.

We did a survey with consumers who own motorcycles and small engines last year

and asked them, "Are you satisfied with the fuel choices on the market. Do you believe that you are using the right fuel for your engine?" And the resounding response across the board was yes.

Mr. McNerney. Go ahead.

Mr. <u>Nicholson.</u> I can confirm that answer. So for USCAR, E15 is fine. We have been that way since 2012. But there are lots of people filling up at the pump with all kinds of small engines that have different answers. But for USCAR E15 is fine.

Mr. McNerney. How far do you think we can go with ethanol in our cars, in most cars out there today?

Mr. <u>Nicholson.</u> Well, E15 is where we are at today. It would require redesign of fuel systems. You have to actually look at every single part that touches the fuel in the car to go higher.

So we are not prepared to really talk about anything higher today. It may be technically possible. But for today E15 is what is okay.

Mr. McNerney. Okay. Thank you. I yield back.

Mr. Shimkus. The gentleman's time has expired.

The chair now recognizes the vice chair of the subcommittee, Mr. McKinley, for 5 minutes.

Mr. McKinley. Thank you, Mr. Chairman.

I am just curious from your testimony. I was just googling the Federal Trade Commission, their website, and their consumer division within ftc.gov says that higher

octane gasoline offers absolutely no benefits, it won't make your car perform better, go faster, or get better mileage, or run cleaner.

I am trying to reconcile that with all the testimony we have been hearing and all this debate. So who is right? The Federal Trade Commission?

If it is not going to run cleaner, better, not going to improve our quality of our cars, are we doing this just to redesign our engines? Because I assume that is what we are going to have to do, because typically our engines today aren't designed run on higher.

So I am trying to reconcile what we are doing here.

Mr. <u>Nicholson.</u> Yeah, I can reconcile that. It is a true statement that if your entire vehicle, including the engine and the way it is calibrated, is designed for 87 AKI pump fuel, regular fuel today, that putting premium in it will provide no additional benefit.

What we are talking about is something very different, a coordinated fuels and engines together as a system approach in the future. And if we redesign the engines to take full advantage of the higher octane and we calibrate them accordingly and introduce them in the market, then we can get this 3 percent benefit that we are talking about.

Mr. McKinley. And the cost of retooling, what can we expect that that would add to the cost of the car, let alone the cost of the fuel when we have to change our engines entirely, our whole fleet? I am just curious about this.

Mr. Nicholson. It is very costly. In fact, if we implement this system, OEMs,

such as General Motors and Ford, FCA and others, would actually be investing billions of dollars to redesign engines, remanufacture them at higher compression ratios to accommodate this fuel.

The fact that we are willing to do that and that we believe this is cost effective relative to other greenhouse gas and CAFE improvements shows you how serious we are.

Mr. McKinley. If I could please, but you are going to pass that cost on, right? I mean, that is what happens.

Mr. <u>Nicholson.</u> Well, we don't believe -- I mean, we are facing regulations for greenhouse gas and CAFE.

Mr. McKinley. I understand that, but the billions of dollars is going to be passed on to the consumer, right?

Mr. <u>Nicholson.</u> But this is the most cost-effective thing that we can do. Other things we will have to do will cost even more.

Mr. McKinley. We will have to have more of a conversation about this.

Let me, the last question, because I want to digest that answer.

The other question has to do with, before I came to Congress apparently there was a move to go with flex fuels. And we experimented. Congress must have passed that. What have we learned? What have we learned from the flex fuel experiment in trying to improve the RFS?

Mr. <u>Nicholson.</u> Fuels and engines are a system, and that is the most important message. It takes all the stakeholders working together to ensure success. And to me,

that is really the lessons learned. We all need to go together and we need a framework and a policy that really support that to makes things happen.

Mr. McKinley. Has it failed? The flex fuel system experiment, did it fail?

Mr. Nicholson. I think everybody can judge that for themselves.

Mr. McKinley. How would you judge it?

Mr. <u>Nicholson</u>. I wasn't here at the time when it was passed.

Mr. <u>McKinley.</u> No, right now, today. Has it worked? Was it a good investment?

Mr. Nicholson. I don't really have an opinion on that.

Mr. McKinley. Anyone else want to comment on the flex fuel experiment?

Mr. Columbus. It didn't work.

Mr. McKinley. It did not?

Mr. Columbus. It did not work.

Mr. McKinley. Thank you.

Mr. <u>Columbus.</u> Well, no. Some of my members created the most expensive parking lot and parking spaces of any convenience store in history.

First, most people didn't know that they had a flex fuel vehicle, as surprising as that might be. Number two, taking E85 to market proved to be a disaster. People didn't understand it. They worried that they weren't getting the same value, even if you had to price it substantially below regular gasoline. And you had to charge 50 to 70 cents per gallon less to have people buy it. So, no, it didn't work.

I contrast that to what we have talked about today.

Mr. McKinley. Anyone else want to comment about that?

Ms. <u>Skor.</u> I would offer, one of the important learnings from that experience that we have acted on -- there is actually government, public-private partnership on building out the infrastructure -- is that one of the things that you needed to make sure is that consumers had access to the fuel so that they could optimize the flex fuel engines.

So one of the things that the biofuels industry has made a concerted effort to do since then is work with the retailers to build out the infrastructure for higher blends so that when we have higher blends come available, consumers can access them in the marketplace.

Mr. McKinley. Mr. Chairman, I yield back my time.

Mr. Shimkus. The gentleman's time has expired.

The chair now recognizes the gentleman from Ohio, Mr. Johnson, for 5 minutes.

Mr. Johnson. Thank you, Mr. Chairman. I appreciate it.

Important topic, especially in a large agricultural region and energy region that I represent in eastern and southeastern Ohio.

Mr. Columbus, do you envision any problems for stations continuing to carry today's fuels for existing vehicles while also introducing a high octane, a new high octane fuel? I mean would the transition be a smooth one?

Mr. <u>Columbus.</u> I do not, sir. Today we have almost every retail outlet in the United States sells a premium grade of gasoline, at least has one offer for that. That is a

95 RON product.

As we go forward and we want to introduce and make the price of those gasolines go down, we will need to add, I believe, more ethanol, and that will drive the price of that product down from where it is today. Today it is a specialty product, and it is priced highly.

Mr. <u>Johnson.</u> Okay. Do you envision gas stations in some parts of the country meeting a high octane standard with more ethanol and perhaps stations in other parts of the country with relatively less?

Mr. <u>Columbus.</u> Yes, sir. I think what you are going to see -- first of all, I want to remind everybody, demand pulls supply. "If you build it they will come" only worked for Kevin Costner, and that was a movie. So we are going to sell what the people want.

In some parts of the country, they want lower ethanol mixes. I don't know why.

I mean, if you go to Mr. Cramer's part of the world today, you can go get E0 for 60 cents a gallon more than you can buy regular grade 10 percent ethanol. I don't know why people want to do that.

But if the demand is there for lower amounts of ethanol, it will get served that way. But on a cost basis, I think you will find that higher ethanol blends will be very attractive.

Mr. Johnson. Okay. Well, thank you.

Mr. Thompson, what kinds of facility changes would refineries need to undertake to start producing high octane fuels or blend stocks for high octane fuels? How much

would they cost?

Mr. <u>Thompson.</u> Well, it depends upon whether the program is phased in. So in our world, in order to do this properly, the RFS would continue and then phase out, sunset. But on the early years of the transition, it would cost our facilities very little because we can now produce 95 RON at the moment and we believe we could make enough to coincide with the introduction of the new vehicles.

Over time it would probably cost multiple tens of billions of dollars of investment to generate new sources of octane, the ability for us to generate that, and also the new BOBs that would have to go along for higher levels of octane.

So this would not be cheap for us. And to a point that was made earlier, we are here not in a void, or a vacuum, we are here offering up a compromise solution to bad status quo, which is how do we help the autos comply with CAFE and how do we make the RFS better. We are willing to make that investment, because at the end of the day it is cheaper for consumers.

Mr. Johnson. Gotcha. Okay.

Mr. Jeschke, how much fuel ethanol use do you expect this year and the years ahead under the current RFS? And how much more could a high octane standard provide?

Mr. <u>Jeschke.</u> We are going to use somewhere 14-plus billion gallons this year, but we would hope to grow that because of increased blending, as Ms. Skor has pointed out many times here. But it all depends on what this group, what this body comes up

with for the rules and regs following. I guess I am skeptical, as Ms. Skor is also, that the petroleum refiners will use more ethanol voluntarily.

Now, as a farmer, as a proponent of ethanol, as a person that has used it in my vehicle since the 1970s -- and by the way, I have a Briggs & Stratton engine that we bought in 1975 on a rototiller that has had E10 in it ever since we brought it and I guarantee, it will start on the second pull every spring. So these small engines can run on ethanol, the old ones, even, that weren't approved for it.

But we need to grow that market for us to be able to expand our corn operation. I am getting the same price when I started farming. Corn was in the mid-\$3. Gasoline was 40 cents then in the mid-1970s. Today, gasoline is \$2.50 a gallon, and I am still getting in the mid-\$3 for my corn.

So dynamics, I am very, very vested in ethanol and trying to promote expanded use. So that is why I very, very much want to see increased blending, not the status quo.

Mr. Johnson. Okay.

Very quickly, Mr. Thompson, you wanted to make a point?

Mr. <u>Thompson.</u> Yeah, I would like to just add, because it has been referenced a few times that we are not using all the ethanol. We are using every drop we can use. There is a blend wall here. We are using as much ethanol as our existing auto fleet can handle. There is no place else for it to go.

And with all due respect to Ms. Skor, she is a wonderful advocate for her client, it

is not accurate that 9 out of 10 cars can handle E15.

The gentleman from California, we can't even sell E15 in his State, okay, by law.

Most cars today are not warranted to run on anything higher than E10. It is a fact.

Mr. Johnson. Mr. Chairman, I yield back.

Mr. Shimkus. The gentleman yields back his time.

We are going to go to Bill Flores for 5 minutes, then we will recess, because I think votes were just called.

And I want to thank Congressman Flores. He has been an ally and a friend working on this together, so I want to give him a lot credit for that.

Mr. <u>Flores.</u> Thank you. We come at this from different angles, but I think we are coming to a fairly common conclusion here.

For the folks that are not in this hearing room, I think it is probably good that we sort of tell everybody how the numbers we are talking about today fit the numbers they say on the pump.

So today, if you see an 87 octane on the pump, that is an AKI octane, which is equivalent to 91 RON, right? So the 91 octane you see on the pump today, is actually a 95 RON. So just for everybody outside the room, I think it helps to reset that we are not talking about reinventing the entire auto refinery ethanol complex here.

Ms. Skor, is there a value to raising the RVP waiver? And what is that value? As quickly as you can.

Ms. Skor. So eliminating the RVP?

Mr. Flores. Yes, ma'am. That is what I meant.

Ms. <u>Skor.</u> Eliminating RVP, absolutely, you would allow a legal fuel to be sold year round, when most of the country it is not able to be sold in the summer months when most families are taking their summer vacation travel.

Mr. Flores. Mr. Columbus, do you agree with that?

Mr. Columbus. I do, sir.

Mr. <u>Flores.</u> Okay. Mr. Columbus, what are the challenges -- well, we have got six States that don't allow anything above E10, which is about 19 percent of our gasoline demand in this country today, California, Delaware, Montana, New York, Oregon, and Wisconsin. So this question doesn't apply to those States. For some reason, they don't like higher blends of ethanol.

But, Mr. Columbus, what are the challenges of having an ethanol blend above E15?

Mr. <u>Columbus.</u> It is the same challenge that E15 faces in terms of market introduction. The overall impediment, the biggest impediment, Mr. Flores, is in fact the infrastructure and how we regulate underground storage systems.

Mr. Flores. Okav.

Mr. Columbus. The Office of Underground Storage Tanks says --

Mr. <u>Flores.</u> So if we go above E15, then we have got a whole new cost element for the consumer, right?

Mr. Columbus. Retailers that are going to E15 now are doing that first and

foremost in new facilities and rehabbed facilities. For the most part, the existing infrastructure is not warranted or certified to take --

Mr. <u>Flores.</u> Okay. I have got a limited amount of time. But if we are asking -- I mean, we have had some panelists ask for mid-blends, E20, E30, higher blends like that. There is a huge consumer cost to that, if we do that, though. Is that correct?

Mr. <u>Columbus.</u> I believe if we do it the way we have talked about, no, because this will --

Mr. <u>Flores.</u> No, no, I am talking about if we mandated -- let's say we mandated a higher RON, 95 or above, and then we also mandated that it has got to be an E20 or an E30, then that is where you get into the higher consumer costs.

Mr. <u>Columbus.</u> Right. If you do a performance specification as opposed to a formulaic specification, the consumer will be best served.

Mr. Flores. Right. Okay.

Mr. Nicholson, if we go to, let's assume, a 95 RON, that gives us the ability to do a nationwide standard from California to Maine, which also matches the RON of Europe.

What are the benefits of that, as quickly as you can share?

Mr. <u>Nicholson.</u> For 95 RON, 3 percent improvement in fuel efficiency and reduction in greenhouse gases.

Mr. <u>Flores.</u> Right. And so you can optimize your engine so that whether you are selling from either coast, even if you are selling your cars in Europe, it is all one standard, which means better economies of scale for production, and you have a lower

impact to the consumer per unit, right?

Mr. <u>Nicholson.</u> As I pointed out in my testimony, Europe has had 95 RON for several years, and consumers are getting those benefits. And I think Americans should get the same benefits.

Mr. Flores. Okay.

Mr. Thompson, we talked about several States have standards that prohibit us from going above E10. So if Congress decides to mandate a formulaic standard in addition to a RON standard, then we are going to have challenges in meeting the standards of some States.

You know, one of the things that has been proposed, one of the comments that was sort of thrown out earlier is that refiners have been anti-ethanol, in so many words. If we raise the octane standard, why would refiners want to use anything other than the cheapest form of octane enhancement, which today is ethanol? Why would that happen?

Mr. <u>Thompson.</u> They wouldn't. And I would like to point out that within my membership we have some of the largest ethanol producers in the country.

Mr. Flores. Right.

Mr. <u>Thompson</u>. And I will just mention that when we look back, and I say this as someone who worked 3 years at EPA and very familiar with these programs, if you look back where we have gotten in trouble as a country, it is always when there has been a mandate or a formulaic approach.

Mr. Flores. Right.

Mr. <u>Thompson.</u> It just is. Versus allowing and creating a performance-based approach to let the market decide the best way forward.

Mr. Flores. So, again, to repeat where I started this conversation when Mr. Barton yielded me some time, by going to a performance standard everybody wins, the environment, our consumers, our auto manufacturers, our ethanol constituents, including the advanced and conventional folks, our marketers, retailers, refiners. Everybody wins. So I am not sure why we would want to do anything other than a performance-based standard.

And I do accept the recommendations of Ms. Skor that we do need to address the RVP waiver. So in terms of the legislative solutions, that is something we will definitely keep in mind.

Thank you, Mr. Chairman. I yield back.

Mr. Shimkus. The gentleman yields back his time.

We are going to recess this hearing. We will return after votes. And I know there will be a couple of us who will return for that. So the hearing is recessed.

[Recess.]

Mr. <u>Shimkus.</u> Thank you all for coming back. We only had one vote, so we will get started.

I would like to now recognize the gentleman from Michigan, 5 minutes.

Mr. Walberg. Thank you, Mr. Chairman.

What is the RFS standard for av fuel?

Mr. Shimkus. Say that again?

Mr. <u>Walberg.</u> What is the RFS standard for plane fuel? I am going to get on a plane here shortly.

Mr. Shimkus. High octane, baby.

Mr. Walberg. High octane.

Well, I appreciate this, Mr. Chairman, I appreciate the hearing. And we all wish it might not have been on a fly-out day.

I, for one I am a motor guy. Living in Michigan, you have got to be a motor guy. Having an almost classic Camaro, I am glad to see GM here. But having antique and classic motorcycles as well, including my Harley. That is an issue of much importance to me.

I have rebuilt engines plenty of times, but it has been primarily because of what I have done to them as opposed to an outside source that can have an impact. And I can't build my classic car engines and motorcycle engines again very easily, changing them from the ground up in order to deal with RFS standards, et cetera.

So this is important. And I don't want them to be expensive doorstops that I can

just look at. The Camaro is downstairs in the parking lot in this building, and I enjoy driving it. And so this is important.

Let me ask you, Mr. Columbus, what can be done to ensure consumers are not misfueling their motorcycles, their boats? I have just recently had to buy a new outboard engine because of the destruction on my good old engine that served me very well. I buy premium zero for my outboard motors. I don't buy that for all the rest. I can't afford it for all the rest of my vehicles.

But how do we deal with that misfueling?

Mr. <u>Columbus.</u> The misfueling is going to take a combination of dispenser equipment and I think auto equipment. We are working with the cars and with the refiners to try to figure out what would be a practical and low-cost regime to protect people from themselves, if you will.

Mr. <u>Walberg.</u> Well, not only. I mean, if you have a pump with a single hose at it and you have whatever was used last left in it, and I come up with my Harley, and I am going to put 2, 3 gallons in, a good percentage of that may be E15 or whatever.

Mr. <u>Columbus.</u> Unless it is marked E15, it won't be E15. It may very well be E10. And what I would suggest to you is you either go to a place that sells E0, and that is easy for me to say to you, or you take a gallon can with you and fill it about half full with that E10.

Mr. <u>Walberg.</u> Yeah, I carry that on my motorcycle, right. When I take a thousand-mile trip, I am going to carry a gallon thing with me. I am saying, these are

things we have to.

And I do wish, Mr. Chairman, we would have had representatives from the marine industry, the motorcycle industry here as well to talk about this, because they are not satisfied that it is going to be for the industry that it is going to work.

Mr. <u>Columbus.</u> But one of the other things you might consider doing is talking to EPA about making its product transfer documents regime a little simpler for people because there is in fact an ethanol-derived fuel, isobutylene, that is a drop-in fuel, it is completely compatible. But trying to get it to the market based on the fact that EPA says you have to have product transfer documents that say you can blend it with that blend stock is really tough.

Mr. Walberg. Yeah, well, let's be careful about this.

Let me go to Mr. Nicholson. Thank you for being here.

What is the investment required for automakers to make the change to vehicles designed for high octane fuels and how much time will you need to do it?

Mr. <u>Nicholson</u>. Thank you for that question.

As I said earlier, switching over all the engines to high compression ratios is literally going to be billions of dollars, investments spread across all the USCAR and other auto manufacturers.

Lead time-wise, we really need 4 years minimum, and that is actually going fast when you think about making all those changes. So if we were to get legislation this year, we think we could be ready for 2022 calendar year or 2023 model year. That is

why we have got a sense of urgency of really trying to go fast as we can here to get this legislation.

Mr. <u>Walberg.</u> What do you expect the increase in fuel mileage will be? And what is going to be the cost to consumer?

Mr. <u>Nicholson</u>. The increase in fuel economy from the 95 RON proposal we think is 3 percent. Some consumers may not notice that as much, but it is really substantial when you think about the CAFE impact. And we think there is about a 3-to-1 ratio, so you get three times more benefit than what the cost would be at the pump. We think this is an excellent value for consumers.

Mr. <u>Walberg.</u> This is the lowest-priced way that you think you can meet CAFE?

Mr. Nicholson. Exactly. For now, this is the most efficient way. Of all the

things that we are doing and considering, this is the most cost-effective one that we have.

Mr. <u>Shimkus.</u> The gentleman time has expired. I would remind the gentleman that we did have small engines here at our last fuels hearing.

So with that, I would like to turn to the gentleman from California, Mr. Ruiz.

Mr. Ruiz. Thank you, Mr. Chairman. I know how it is when you sit on the committee and wait for the very last person, so I am going to yield my time to Mr. Loebsack from Iowa.

Mr. Shimkus. You are very kind.

The gentleman from Iowa is recognized.

Mr. Loebsack. Thank you, Mr. Ruiz.

And thank you, Mr. Chairman, for holding this hearing, and thank you for letting me be waived onto this subcommittee as well. I am going to have to think of something to help Mr. Ruiz with, because that was very kind of him.

Listen, I think we all know that the future of America's transportation fuels is an important topic going forward, and I have really enjoyed the debate today, such as it has been.

We have had some positive moments, including yesterday when the President publicly supported allowing year-round sales of E15. We want to make sure that he follows through with that going forward. That is an issue that I have championed with Congressman Smith from Nebraska. We have had legislation that we introduced on that front.

But there have been some seriously concerning moments when it comes to these kinds of issues. We have seen recently some reports about the waivers that the EPA has granted to small refiners, so-called small refiners, to release them from their obligations under the RFS program.

And one of the problems is that these waivers have occurred sort of under the cover of darkness, too. It hasn't been an entirely transparent process. And I brought that up with Energy Secretary Perry yesterday, as a matter of fact, in this very same room. And essentially, they have amounted to giveaways by the EPA, I would argue, to some of the Nation's largest, most profitable refiners.

As you all can imagine, the biofuels community and farmers in Iowa have

expressed significant concerns about these reports to me directly, as a matter of fact.

And these concerns have been echoed by many, including the Secretary of Agriculture himself, Sonny Perdue, who stated earlier this week that these waivers reduced the statutory volume gallon for gallon, essentially.

So it has become quite clear to me that this action does constitute a demand reduction, destruction, in effect, and a reduction, if you will. And I can only imagine how harmful this will be to Iowa farmers, to Illinois farmers. Also, to the folks who support the industry, all the workers in the biofuels industry that we often don't think enough about, I would argue.

So, Ms. Skor, I am really happy to see all of you here today, but I want to ask you, in particular, a couple questions, if that is all right.

Do you believe that the EPA is misusing these hardship waivers?

Ms. <u>Skor.</u> Absolutely. We would agree with our Secretary of Agriculture, as he said that.

There are a few very troubling things about what is taking place right now. One is that this is under the cover of night, so we don't know how many refiners are getting waivers and we don't know the justification.

From the reports that we have seen, just for 2017, Mr. Pruitt has quadrupled the relatively historical number of waivers granted. And the impact of the behavior that we are seeing coming out of EPA is you are taking over a billion gallons of demand out of the marketplace. Every waiver granted is a gallon of biofuel that is not blended.

Mr. <u>Loebsack.</u> Right. And as I said, we did have Secretary Perry right here yesterday and I did ask him about that. Because by law the EPA is supposed to consult with the DOE before they do this. And he said that did happen, but he wasn't particularly specific about that consultation.

So I have submitted a number of questions to him in terms of how often this has happened since 2013 so he can get back to us. And we want to know specifically when it has happened.

So you mentioned about a billion gallons, you think, of biofuels?

Ms. <u>Skor.</u> Over a billion gallons. And that is moving us backwards to 2013 blending levels. So with these steps, we have moved back 5 years and turned back the clock on the progress of the RFS.

Mr. Loebsack. And that is very disconcerting, obviously.

Mr. Jeschke, it appears to me that the biofuels industry and agricultural groups have not yet identified what the right path forward on octane is. Would you agree with that, that we haven't gotten an agreement?

Ms. Skor. Yes, I would.

Mr. Loebsack. How about you, Mr. Jeschke?

Mr. Jeschke. Yes.

Mr. <u>Loebsack.</u> And just make sure that everybody here keeps us up to date on what is going on. I know the committee is going to be kept up to date. But we want to make sure that we are in touch with all the stakeholders, really. I have only asked

questions of two folks. But I am concerned that this be something that all the stakeholders do take into account and have some input on going forward.

I would agree with the chair of our committee that, while I was not here in 2005, clearly things have changed here in America. But we still have a lot of the same concerns around the RFS and why we have the RFS in the first place. And part of it is I don't want to be sending relatives that I have over to Middle East to fight in conflict where oil is at stake.

We do have a national security issue here. But as one person from Illinois just a minute ago told me confidentially in a conversation, this is about food and agricultural security as well. We have to keep that in mind going forward.

So thanks, everybody. I appreciate it.

And thank you again, Mr. Ruiz, for allowing me to go ahead.

Mr. Shimkus. The gentleman yields back his time.

The chair now recognizes the gentleman from Texas, we have a few of those on this committee, Mr. Olson, for 5 minutes.

Mr. Olson. Thank you, Mr. Chairman.

And before I talk about the RFS, I want you all to note a very important thing to happen about 2 hours ago in this committee. Our chairman proved he is a want-to-be Texan. He keeps saying "y'all." "In Texas, bigger is better." Recognition, he is my mentor. He gave me a Shimmy, a bobble head John Shimkus. I am going to put a cowboy hat.

Welcome to Texas, Mr. Chairman.

I want to be serious about, as you all know, I have some deep concerns about going forward with the RFS as it stands today. It was designed for a very different American energy environment. We were an importer of oil and gas. Now we are an exporter. I think today it stands as a very flawed mandate.

One problem I have with the RFS is the severe costs it has placed on smaller independent refiners, like CVR, which is headquartered in my district, Sugarland, Texas. For those reasons, I worry about the potential cost of an upgrade to newer higher octane fuels.

First question to you, Mr. Thompson. Could you please talk about what sorts of projects you have or changes we have to make to move to a higher octane fuel and what that might cost? Would that be doable for small refiners like my guys in Sugarland, Texas?

Mr. <u>Thompson.</u> Well, a couple things. We are very proud of CVR as well, CHS, and all of our small merchant refiners, and they are supportive of me being here today and talking about higher octane, for sure.

So initially moving to a higher octane standard, provided it is on a proper glidepath, there would be little investment required because we have the capability now to deliver the volumes that a new fleet of automobiles would require.

Over time it would require investment. A preliminary analysis would be literally tens of billions of dollars to develop new ways and new capacity for octane sources.

I can't get into the specifics because every refinery is different, as you know, and there are lots of different ways to increase octane, so each refinery would have to look at its operations.

But this would be a major investment. And the only reason we are willing to do it is because we would prefer to make this investment than the investments that we are required every year to comply with the RFS, which is doing very little to help consumers.

Mr. <u>Olson.</u> One final question. This came up with Secretary Perry yesterday, sitting just where Mr. Nicholson sat.

He spent a lot of time in Iowa in 2016 running for the White House. That seems to be an important place to have spent a lot of time here. He had a lot of dealings with ethanol, obviously, in a corn State.

He said his perception was the people who produce corn in America care a little bit about where the ethanol goes, what gas tanks, but they don't care too much American or overseas. They just want a supply source so they can put their ethanol in a gas tank.

He brought up the idea of exporting our ethanol to Mexico. Any thoughts about, Mr. Jeschke? I mean, the idea just popped in my head yesterday, but that might be a viable alternative to what we have right now.

Mr. <u>Jeschke.</u> Well, the U.S. Grains Council, of which I am a part, I sit on one of their committees, is looking at Mexico and is very involved with corn grower checkoff money in trying to educate and help the Mexicans figure out how they might replace MTBE, which I know is a favorite of some of you, and that is used in Mexico now

extensively. But looking to possibly replace that with ethanol.

So we are looking at all export markets as an opportunity to try and grow our demand. So that is currently going on. It isn't something that would be brand new.

Mr. Olson. Ms. Skor, your thoughts on exporting ethanol to Mexico?

Ms. <u>Skor.</u> We are thrilled that Mexico has opened its markets and is looking at ethanol and E10. And so we have been in regular conversations with stakeholders in government and industry there.

I would say that exporting homegrown renewable fuel to Mexico is wonderful, in addition to making sure that we are taking advantage of this homegrown renewable fuel in our backyard.

Mr. Olson. Thank you. My time is over. It is time to mosey on down the road, like we say in Texas. I yield back.

Mr. <u>Shimkus.</u> I did think the gentleman did say a small refinery in Texas. Didn't you call it a small refinery?

Mr. <u>Olson.</u> It is in Kansas, actually. The headquarters is in Sugarland, but the refinery is up in Kansas, a rather small one.

Mr. Shimkus. The headquarters of a small refinery is in Texas.

Mr. Olson. Yeah.

Mr. Shimkus. Okay. I just want to clarify just for the record.

Mr. Olson. Come to Texas. You will learn about more about it.

Mr. Shimkus. Now, I would like to recognize the gentleman from Georgia for 5

minutes, Mr. Carter.

Mr. <u>Carter.</u> Thank you, Mr. Chairman. I don't know how to follow that exchange, but nevertheless I will do my best.

Thank you all for being here. Let me tell you, I represent the entire coast of Georgia. I have over 100 miles of coastline. My concern in this hearing today is mainly about marine engines, because we are having a lot of problems with the new blends having degradation on our engines, and it is something I am very concerned about.

It is my understanding that the butanol has properties that more closely resemble that of gasoline, or align with gasoline, than ethanol does and that it has less of an impact, less of a negative impact on the engines.

In fact, the National Marine Manufacturers Association and the American Boat and Yacht Council underwent a 5-year study with the Department of Energy studying this, and from what they have come up with, comparing it to ethanol. And that study said that biobutanol and similar biofuels have a higher energy content and similar emission properties and reduction properties while lowering the degrading properties on the engines.

Have you heard of this? Has anyone heard of this?

Mr. Columbus. Yes, sir.

Mr. Carter. Mr. Columbus. Yes, that is fine.

Mr. <u>Columbus.</u> I have. The producers of isobutanol are eager to try to work something out with EPA so that they can, in fact, put their additive with blend stock set

for E10. They have got to go through a whole process. Anything you can do to help EPA --

Mr. <u>Carter.</u> So you are telling me the problem is something that we need to be addressing here in Congress -- or in EPA?

Mr. <u>Columbus.</u> There is a regulatory impediment to their taking a product to market in an efficient way. And yes, it is EPA, and my bet is that the folks at EPA would be thrilled to hear from you about this.

Mr. <u>Carter.</u> Okay. Well, thank you for that information. I didn't realize that. And that is very important.

Can it work? I mean, do you think that this would be better?

Mr. Columbus. Look, it is a different thing than fuel ethanol.

Can it work? Sure. It is a relatively small production item today.

Mr. <u>Carter.</u> All right. Can I stop you right there and ask you, it is a relatively small production item today, how are we going to get to it market, then? Because it is not going to do any good if we can't get the product the people.

Mr. <u>Columbus.</u> You will get it to market the same way ethanol historically has gotten to market. It will go by train or barge and it will go --

Mr. Carter. But I am talking about demand, if there is not enough demand for it.

Mr. <u>Columbus.</u> Well, I think what you have just said is, if it is marketed properly in the marine community, there will be plenty of demand for it. How it will get to that market will be the same way that ethanol moves or that any other component moves.

Mr. <u>Carter.</u> Right. I understand the transportation. But I am just looking at it in terms of the economics. I mean, if there is not enough of a market there, a demand for it, then I am afraid it is not going to get to people.

Mr. <u>Columbus.</u> Well, the manufacturers of it assure me that they think there is plenty enough demand to support their efforts.

Mr. Carter. Okay.

Mr. <u>Columbus</u>. They are just trying to get rid of the regulatory impediment.

Mr. <u>Carter.</u> Okay. Well, fair enough. And we certainly will try to see about it.

Let me ask you, while I have got you, Mr. Columbus, about how it is marketed.

And let me ask you something. You know what E88 and E15 mean to my wife?

Absolutely nothing. And yet we have this problem with marketing.

And that is a big concern of mine because we have got a number of consumers who are using these fuels inappropriately and putting them in marine engines and it is causing them significant problems.

Mr. <u>Columbus.</u> Mr. Carter, with due respect to those people that you know who do that, I cannot help them if they will not read letters that are this big on the pump that say don't do that.

Mr. <u>Carter.</u> I get it, and I understand that. But at the same time can we do a better job of the marketing process of it?

Mr. <u>Columbus.</u> Well, I think all of us have done what we can when we ruled out these ultra-low sulfur fuels. When we roll out a new fuel, EPA undertakes an effort with

the refining community, with the marketing community to educate consumers.

I cannot help people who will not read these things. And I know that sounds hard. But what you are finding out is the number one thing that people buy gasoline on isn't what it says on the pump, it is the big, stupid price sign. It is, what does it cost?

Mr. <u>Carter.</u> Absolutely. I would agree with you.

Mr. <u>Columbus.</u> And if they are prepared to put their second-most expensive investment at risk for 3 cents a gallon or 4 cents a gallon, it is a choice.

In the 1970s, I watched people carve out fill pipe restrictors to put leaded gasoline into a car meant to take unleaded and then were angry and sued retailers because they said: That leaded gasoline that you let me buy at your outlet poisoned my catalytic converter, and when I went to register my car, it cost me a thousand dollars. I can't help those people.

Mr. <u>Carter.</u> Mr. Columbus, I am with you. I understand your point. I think it is a valid point. But with all due respect, I think that we and the industry can do a better job in helping by simply using better marketing and --

Mr. Shimkus. The gentleman's time is --

Mr. Carter. Excuse me, I am sorry. I didn't realize that.

So I hope you understand my point.

Mr. Columbus. I empathize with your problem, Mr. Carter.

Mr. <u>Carter.</u> Thank you.

Thank you. And I yield back.

Mr. Shimkus. The gentleman yields back. I want to thank my colleague.

We have got an agreement by my friends on the minority side to be able to go to one more round, if that is okay with you all. Obviously, there are only a few of us left, so I don't think it will take very long. So I will recognize myself for 5 minutes, too, for a second round of questioning.

Thank you all. Understand, this where we need your help. There are a lot of things that we need to hash out. So understanding that a 95 RON fuel can be produced in different ways by different refineries, can you estimate how many billions of gallons -- not now, help us, provide this information -- estimate how many billions of gallons of ethanol would be used to produce a RON fuel at EO, E10, E15, et cetera? We had conversations about this over the last couple days.

We need to know that. And I would even suggest you could do it collectively, peer-reviewed. We need those numbers.

The other thing that popped in my mind is if the vehicle fleet transforms or starts moving 7 percent every year, so a whole passenger vehicle -- except for my very old car that I drive, there will be a few outsiders there -- 13 years, right? So I don't know if it is possible. What happens in this 13-year transition to a high octane standard and where are the billions of gallons of what we would hope would be homegrown ethanol produced in America, right?

We really just need numbers. Again, you could do it collectively, peer-reviewed.

If you want to do it separately, then we will fight about whose numbers. Formulas are

formulas. We will need defined variables. But we just need that help, and I would ask that you would do that.

Another question is, whatever the high octane standard is set at, would you imagine a market for even higher octane fuels above that level? And we can just go through, and then I have a follow-up to that.

Mr. <u>Columbus.</u> Yes, sir, absolutely. If you take a look the way fuels have developed over the last 78 years, you will see that there is always a creep.

With respect to Mr. Nicholson, somebody at GM is going to look at you and say that Corvette of yours, if you want it to purr like a kitten, you would run it on 98 RON or 100 RON. It is just how things happen.

So, yeah, we anticipate that 95 RON will ultimately become a floor.

Mr. Shimkus. Ms. Skor.

Ms. <u>Skor.</u> I would hope, yes, that there would be a continued appetite for even greater octane in the country.

Mr. Shimkus. Mr. Nicholson.

Mr. <u>Nicholson.</u> Yeah. First of all, Mr. Shimkus, I would like to offer that USCAR could be the broker to kind of do this analysis that you talked about. So we would certainly be willing to work with everyone on this panel to just do that analysis peer-reviewed so that we could get back to this committee with those numbers.

Mr. Shimkus. Thank you for that offer.

Mr. Nicholson. So I will just say that to anybody on the panel that would like to

be part of that.

To your question, for sure there will be premium fuels on top as there are today.

As mentioned, Corvettes will always want to use the best possible, as well as luxury cars.

So I see that market developing.

In fact, I would even go further to say there could be even more demand in the future given the very difficult CAFE regulations that are in front of us. You know, OEMs actually have an incentive to specify premium required, because we then get to take advantage of that octane with the regulators in certifying that.

What prevents us from doing that today is the cost prohibitive 50 cent per gallon that you see at the pumps, and most customers, except for performance vehicles, just won't put up for that.

Mr. Shimkus. Great.

Mr. Jeschke.

Mr. <u>Jeschke.</u> Yes. I would hope that we would look to those higher blends, higher octane with higher blends, because I think concern for the environment will not get less. I think it will continue to become greater and greater. So I believe the higher octane fuels, as Mr. Nicholson said, will help them to achieve those goals.

Mr. Shimkus. Mr. Thompson.

Mr. <u>Thompson.</u> Well, we are certainly prepared to offer up 95 RON as a floor, not a ceiling, and let the market decide where it should go.

And I will just note that E15 and E85 have been around a long time, and consumer

preference has decided where those products go. We do not control access to market.

So the consumers are going to decide whether they go higher. We would be open to it, provided that the floor is 95.

Mr. <u>Shimkus.</u> Great. Let me finish with this last one. What regulatory actions would be needed to make that extra high octane fuel available?

Mr. <u>Columbus.</u> You have to have a modification of the one-pound RVP waiver.

And I think you have to let the infrastructure evolve or you have to change the regulations -- again, the Office of Underground Storage Tanks at EPA -- the latter of which I do not believe any of you are going to be prepared to do.

So the reason we are as supportive of this roll-in as we are is we believe the infrastructure will build out and it will build out earlier because they will see down the road there is a guaranteed return.

Mr. <u>Shimkus.</u> So my time has expired. I will look at my colleagues. Can I finish this question? Is that all right?

So, Ms. Skor.

RPTR TELL

EDTR CRYSTAL

[11:24 a.m.]

Ms. <u>Skor.</u> So I just want to kind of clarify, what is most important and critical from the consumer perspective, especially when you are looking at fuel diversity and choice at the pump, is access. When consumers have access to E15, which is unleaded 88, and a 5- to 10-cent gallon savings, what we are seeing is they embrace it. They wholeheartedly embrace it. And if you look at the sales of E15, they are increasing when consumers have access.

But the most important point there is access. A big impediment to that consumer access is Reid vapor pressure. So you grant that and you allow full-year sales. And I think that is one of a few impediments that we need to allow consumers to be able to access higher blend and better-for-the-environment fuels.

Mr. Shimkus. Mr. Nicholson.

Mr. <u>Nicholson</u>. First of all, I would say that perhaps a national standard for a premium kind of fuel might be a facilitator for a market demand for such a thing.

Should be from my point of view a performance-based standard. But 95 RON can be the regular fuel and there could be a national standard for a higher one. That might be a good idea.

We will need some kind of cooperation with regard to EPA. It has been briefly

mentioned here. And I just wanted to point out that our vehicles today are certified to the 9.0 PSI RVP certification fuel. So it needs to be ensured that this requirement is met regardless of fuel composition to ensure the proper operation of the evaporative emission system. So we are going to have to work out some details, but I think it can be done.

Mr. Shimkus. Mr. Jeschke.

Mr. <u>Jeschke.</u> Yes. I guess, Mr. Chairman, I would just point to the points that I mentioned in my opening statements.

Mr. Shimkus. Very good. Thank you.

Mr. Thompson.

Mr. <u>Thompson.</u> Quickly, I can't help myself. Access. Refiners, we own less than 4 percent of the retail stations. We don't control access. Mr. Columbus can attest to that. So this notion that big, bad oil is preventing access simply is not true.

As far as, if I understand your question about how do we get to 95 RON, it is for the RFS to sunset, and in return for that we will be committed to a 95 RON standard.

Mr. <u>Shimkus.</u> Yes. I think it was like, if 95 is a floor, then what would be the regulatory actions we need?

Mr. <u>Thompson.</u> Okay. I am sorry. Then the issue is EPA has mechanisms now. E15 got to the market without a big overhaul of the Clean Air Act. EPA has mechanisms now for certification fuels to get authorized. I would say go through the process.

Mr. Shimkus. Thank you. And I will return the balance of my time. And I again thank my colleague, Mr. Tonko, for allowing us to go a second round and recognize him for 5 minutes.

Mr. Tonko. Thank you, Mr. Chair.

Mr. Nicholson, as I understand it, any and all cars on the road today can use premium fuel?

Mr. Nicholson. You say can they use premium?

Mr. Tonko. Yes.

Mr. Nicholson. Well, yes, they can.

Mr. <u>Tonko.</u> So when GM creates this new vehicle, this new engine, they are recommending use of premium. You are suggesting it runs it better. But what is to deny the consumer from fueling up with regular without damaging the engine? So basically if it is the choice of premium or regular, cheaper or more expensive, how do we guarantee that any benefits of that premium use will actually be realized?

Mr. <u>Nicholson.</u> Well, thank you very much, and I just want to come back to Mr. McKinley's point. You know, consumers could do that today. I don't really know anybody that does that because putting premium in a regular-fueled vehicle doesn't get you any benefit.

What we are proposing is not premium fuel. It is a new 95 RON high octane fuel for new greenhouse gasses.

We still definitely have to deal with the misfueling issue. For example, if

someone generally were to use the new 95 RON fuel in a 2018 model regular vehicle there would really be no problem. You would have higher octane, but it would be very little benefit because the vehicle wasn't designed for that. So what we are proposing is the engines are designed and they use the new fuel.

The misfueling problem we worry about is they use today's regular fuel in their new vehicle designed for 95 RON. That is a problem, and that is a remaining issue. So we have got misfueling risks that we need to work on.

Mr. Tonko. So do you then require premium, not recommend it?

Mr. <u>Nicholson.</u> We require the new 95 RON fuel. That is what we would do, and we need all OEMs to go together to do that. The analogy maybe is just the way we switched from leaded fuel to unleaded fuel.

Mr. <u>Tonko.</u> So you are redesigning an engine that will require not recommend premium?

Mr. <u>Nicholson.</u> Yes. Exactly. It will be required. And we are going need all the OEMs to go together to make this work.

Mr. Tonko. Okay. I yield back, Mr. Chair.

Mr. Shimkus. The gentleman yields back his time.

The chair then now recognizes the gentleman from Texas, Mr. Flores, for 5 minutes.

Mr. Flores. Thank you, Mr. Chairman.

Ms. Skor, you recommended that we have a one-pound RVP waiver year round for

Ms. Skor. Correct.

Mr. Flores. Okay.

Mr. Columbus, would there be any problems from your constituents' perspective?

Mr. <u>Columbus.</u> It is not a problem for us. I mean, what we propose is a waiver for any fuel that has an RVP that is equal to or less than E10, and you can go up to E25 or so.

There is an infrastructure problem. It is no fun to talk about underground storage tanks. Nobody likes that. And nobody sees them. And well over 60 something percent of the retail outlets in the United States have changed hands since the turn of the millennium. Most of those tanks, the owner doesn't know exactly what he has got.

So the impediment to taking the fuel on through is that it is a violation of the Resource Conservation Recovery Act to store E15 or E20 in an underground storage tank that the owner and operator cannot demonstrate was warranted to be compatible with that blend.

Mr. <u>Flores.</u> Let me try to come back to the original question, though. Is there a downside to having the RVP waiver, the one-pound waiver, year round for your constituents?

Mr. Columbus. No, sir.

Mr. Flores. Okay.

Mr. Columbus. No, sir.

Mr. <u>Flores.</u> Sorry, I didn't mean to cut you off, but I know the chairman will eventually.

Mr. Nicholson, is there any problem for USCAR?

Mr. <u>Nicholson.</u> As I mentioned previously, our vehicles are certified to the 9 PSA RVP certification fuel. So it just needs to be ensured that this requirement is met regardless of the waiver or not to ensure the proper functioning of evaporative emissions systems.

Mr. Flores. Okay.

Mr. Jeschke, would your constituents have any issue with it? I think you asked for it in your testimony, if I recall.

Mr. Jeschke. That is correct.

Mr. Flores. Okay.

Mr. Thompson, is there any problem with your constituency?

Mr. Thompson. With?

Mr. Flores. With a one-pound waiver year-round for all grades, all blends.

Mr. <u>Thompson.</u> We are willing to entertain the idea as a part of a comprehensive RFS solution.

Mr. Flores. That is where I am going with this, is if we talk about --

Mr. <u>Thompson.</u> We would not be too keen to the idea, as has been reported yesterday, in exchange for nothing because -- that is not something we are interested in.

Mr. Flores. Okay.

Mr. <u>Thompson.</u> We are willing to put it all on the table like we are doing. We have been very candid.

Mr. <u>Flores.</u> Right, and that is what I am talking about. I mean, I am trying to address the needs of the broadest constituency possible, I mean, from the environment to the consumer to all of your constituencies at the table.

So you kind of introduced the next part of this question, and that is if we don't do anything we have got a status quo. And I think several of you have complained about the way the EPA has adjudicated the RFS. And so do all of you feel like a statutory solution is the better outcome here than where we are today?

Mr. Thompson, I will start with you.

Mr. Thompson. Absolutely.

Mr. Flores. Okay.

Mr. Jeschke.

Mr. <u>Jeschke.</u> I couldn't answer that, I guess, without consultation.

Mr. Flores. Okay.

Mr. Nicholson.

Mr. <u>Nicholson.</u> We believe a legislated solution will be really helpful to the overall process to make sure that all the parties are coordinated together, which is really important.

Mr. Flores. Okay.

Ms. Skor.

Ms. Skor. I believe that a conversation about high octane fuels can, and I am glad we are having that. I also believe that conversation can have outside of any conversation to do with the Renewable Fuel Standard. This body can move us toward a path of a national fuel standard and doesn't need to do that in the context of the Renewable Fuel Standard.

Mr. <u>Flores.</u> Would you repeat your answer now? Say that again. I want to make sure I can drill into this one.

Ms. <u>Skor.</u> I applaud the conversation today about moving toward a high octane standard.

Mr. Flores. Okay.

Ms. <u>Skor.</u> But this body can move toward that goal without touching the Renewable Fuel Standard.

Mr. Flores. I see what you are saying. Okay. All right.

Let me say this. Is what we are looking at in terms of a statutory solution preferable to where we are today where you have got the EPA that is doing things that you already said today you don't like?

Ms. <u>Skor.</u> I actually would not -- I would not say that a statutory action is preferable to the situation. I think the challenges with EPA are on the administrative side and we need to make sure that the EPA is implementing as envisioned by Congress.

Mr. Flores. Okay. And those aren't unique to this administration, right?

mean, this was going on in the years prior to this administration.

Ms. Skor. Yeah, these are some different challenges most recently, yes.

Mr. Flores. Okay. All right.

Mr. Columbus.

Mr. <u>Columbus.</u> My answer is yes. My concern about what is going on with the status quo is because of the things that have been going on there is a significant amount of uncertainty in the market. And commodities markets really like certainty. When there is uncertainty you see values go up, down, sideways. People who are involved in the system get caught in a box.

So we think you should move forward, and we like the high octane solution as a good place to start.

Mr. <u>Flores.</u> Can I indulge the chairman and the ranking member to give me 1 more minute?

Mr. Shimkus. Without objection.

Mr. Flores. Okay. Thank you.

So my final question is this. Mr. Nicholson, this will be for you. And I am glad to hear that there is a fighting Texas Aggie in terms of worldwide propulsion for GM. I can't wait for you all to build a 700-horsepower Tahoe for me that gets 35 miles to the gallon.

That said, we are talking about something that is really broader than the U.S. possibly here. And when we talk about worldwide environmental impact you said that

there is already a 95 RON standard in Europe.

Mr. Nicholson. Yes.

Mr. <u>Flores.</u> If we have one single nationwide standard in the United States for 95 RON what other countries would likely follow on? Which would make USCAR and U.S. refining and U.S. ethanol put us all kind of on the same -- and consumers -- kind of all on the same page.

Mr. <u>Nicholson.</u> Yes, thank you. As you pointed out, Europe has already proven that 95 RON is a great solution that delivers efficiency. As I said earlier, I think Americans deserve at least as good a fuel as the Europeans have. And I think by historical patterns, let's say, there is high likelihood that Canadian and Mexican would, let's say, follow.

Mr. <u>Flores.</u> Okay. So we could set a new emissions profile for the entire North American continent.

Mr. <u>Nicholson</u>. I think one national standard would provide leadership and show leadership that would likely be followed.

Mr. Flores. Okay.

Thank you for indulgence. I yield back. It was a great hearing today.

Mr. Shimkus. Thank you. The gentleman yields back his time.

Seeing no further members wishing to ask questions for this panel, I would like to thank all of you for being here again today.

Before we conclude I would ask unanimous consent to submit the following

document for the record, a letter from my friends at the Renewable Fuels Association. Without objection, so ordered.

[The information follows:]

****** INSERT 3-1 ******

Mr. <u>Shimkus.</u> And pursuant to committee rules, I remind members that they have 10 business days to submit additional questions for the record.

I ask that witnesses submit their response within 10 days, except for that probably lengthy review of billions of gallons. That will take longer than 10 days, I would assume.

Without objection, the subcommittee is adjourned.

[Whereupon, at 11:35 a.m., the subcommittee was adjourned.]